THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. XLV. SATURDAY, DECEMBER 6, 1884. NO. 23.

ORIGINAL LECTURES.

THE NERVE-COUNTERFEITS OF UTERINE DISEASES.

A Clinical Lecture delivered in the Hospital of the University of Pennsylvania.

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GENTLEMEN: The crying medical error of the day is, in my opinion, the mistaking of nerve-disease for womb-disease. From this widespread delusion it has come to pass that no organ in the human body is so over-treated and, consequently, so maltreated as the womb. Fine lesions of nerve-ganglia are hard to make out, however exacting their symptoms. Take, for instance, insanity or epilepsy; even in the dead-room their lesions often elude our instruments of precision. But the womb, unfortunately, being reachable, seeable, and directly treatable, is charged with almost all the ills that female flesh is heir to; and it is too often made the scapegoat for headaches and nape-aches, for spine-aches and backaches, and for various other so-called uterine symptoms which may be due solely to nerve-exhaustion, or malnutrition of nerve-centres, and not to reflex action from some real or supposed uterine disorder. Then, again, misled by traditional teaching, by such a name as woman (womb-man), by such a misnomer as hysteria (womb-disease), we yoke our practice to theory. So whenever we find a train of *hysterical* symptoms associated with a disordered or a displaced womb in a *womb-man*, we jump with doubled energy to the conclusion that the uterine lesion is not a symptom, or a sequence, or a coincidence, but the factor, and at once proceed to treat it accordingly. Then, again, forgetful that the imponderables are great forces in nature, that a single mental stimulus to unstable nerve-molecules will awaken many reflexes, we overlook the tyranny of woman's oversensitive organization, and underrate the influence of nerve perturbations or of psychical disturbances.

To substantiate these assertions, let me recall a case to your memory: Six weeks ago to-day I brought before you a very helpless invalid, who, accompanied by her husband and her sister, had just arrived from one of our Southern States after a long journey made on a litter in a baggage-car. She was a large, stout, and well-conditioned woman, forty-two years of age, and the mother of several children. Eleven years ago she gave birth to her youngest child. The labor was easy, but her getting up was slow, and when she tried to walk she suffered so much pain that before long she took to her bed, where she had stayed ever since, growing more distressed and more helpless every day. During all this time she had, to use her own language, "been doctored for womb-disease," but without benefit. She could lie in only one position, viz., partly on her right side and partly on her back, with her knees drawn up and her hips higher than her head. To keep this unnatural and ludicrous position, a large folded blanket and half a dozen pillows were needed. Then she had a thick pad placed between her knees and a perforated one under her right ear. In addition, "to keep her womb up," she wore a formidable looking abdominal brace. Her lower limbs were, she alleged, paralyzed, and, in fact, as you will remember, I thrust a pin several times into them below the knee without inflicting the slightest pain. Her appetite was poor, her bowels extremely costive, her monthly periods regular, but painful and somewhat free. She was wakeful at night, full of aches and pains, and had an irritable bladder, which kept her and her nurse pretty busy. Her feet and hands were always cold, and she complained of being always very tired. A more helpless creature could hardly be met with; a more padded and bolstered and upholstered one I never saw before.

But the case turned out more promising than it at first looked. As soon as I had laid eyes on the woman, and had asked her a few question, I felt sure that her mind was more diseased than her body, and that she was, in short, hysterical. These conclusions were arrived at for the following reasons: *Firstly*, she was too well nourished for a person with any serious uterine disease. *Secondly*, her skin, excepting that on her legs, was so over-sensitive that she would not let me palpate her abdomen, or make a vaginal examination. *Thirdly*, there was a suspicious capriciousness about her pains; they were too irregular and shifting for fixed organic disease. *Fourthly*, there was an indescribable affectation of suffering, an exaggerated self-consciousness which made her enjoy the description of her aches and pains. *Fifthly*, she wore the tell-tale hysterical mask; that is to say, while she spoke of her sufferings in language and tones consonant with their alleged severity, there was no play of the features, no movement of the facial muscles; her face was as blank and unmeaning as a mask. Lastly, her history revealed two nerve-shocks: the sudden death of one of her children just before her lying-in, and a family trouble—a skeleton in the closet—which had worried and fretted her for many long years.

You will remember that, in order to make a thorough diagnosis, I was obliged to put her under ether, and the following information was gleaned: The vagina was flabby and lax; the womb perfectly movable, but somewhat lower than it should be; the os externum slightly torn, but not enough to warrant an operation. The sound gave a measurement of barely three inches, and there were the usual signs of uterine catarrh. Now, such lesions should not make a woman bedfast. Many a poor woman is earning her daily bread by hard labor, and many a lady is faithfully discharging her social and domestic duties, although handicapped by reproductive organs in a far worse plight than our patient's. So I told you, then and there, that she was bedridden from her brain and not

from her womb; and that I should pay very little attention to the latter organ, which had already been overtreated.

To-day, after the lapse of six weeks, I, with no little pride, bring her again before you, to show you the result of the treatment. The uterine lesions are not much better, and they probably never will be until the change-of-life; yet her pads, and pillows, and bolsters, have been laid aside, and her abdominal brace is no longer in use. Her last period was still free, but without pain. She moves about, as you see, without difficulty. She goes upstairs and downstairs all over this large building, and she has walked several of our long squares in the streets. Yesterday, she rode in the street-cars to a dentist, two miles away, and had six fangs out. To-morrow, she starts alone for home. Now, what has brought about this marvellous change? And why is she so well, when her uterine troubles still exist? These are the questions which I know you are asking yourselves, and I shall try to answer them as soon as she is out of hearing.

Before making this case the text of my lecture to-day, let me briefly allude to another one which I have lately treated in my private hospital, and which is a sample of many others. A very weak and emaciated lady, sent to me for uterine trouble, had ptosis of the right eyelid, complete paralysis of the lower extremities, and such anæsthesia in them that the prick of a pin could not be felt. She also had irritable bladder, weariness, wakefulness, costiveness, and cold feet. Further, she had a retroversion of a hypertrophied womb, which had been very ably treated by her physician. These uterine lesions had drawn him off the scent, and had led him to the belief that they alone were the causes of her ill-health. But my reasoning was this: Why, if so, is she still helpless when the womb is kept in place by the pessary which she is wearing? I soon found out the true cause, which was mental distress at the engagement of her daughter with an unsuitable person. Without local treatment of any importance, and simply by moral and constitutional remedies, she left me in seven weeks' time, not cured—for she did not stay with me long enough—but so immensely improved that the ptosis, the paralysis, and the loss of sensation had disappeared; the constitutional symptoms had vanished; she had gained much flesh, and was able to walk about with the aid of a cane. Of course, the cause of her worry was not removed, but the effect of the treatment made her better able to bear it, and not to exaggerate it.

I know of another sofa-ridden lady, of wealth, who had for many years been locally treated by some of our best gynecologists. She was put on her feet and made well by a family quarrel resulting in a prolonged lawsuit. These are the cases which are so constantly being cured by mesmerists and itinerants, and by faith and pilgrimages. I could give you the history of other such bedridden cases sent to me for uterine treatment which, without any such treatment whatever, were restored to health. Many cases I have had which, of course, needed, in addition, some local treatment; but what I wish strongly to impress upon you to-day is that, in the vast majority of bedridden or of sofa-ridden women, it is not so much any existing uterine trouble that puts them on their backs as it is nerve-exhaustion from some nerve-shock. For, in these days of mental overstrain, nerve-exhaustion, or neurasthenia, as it is technically called, is a most common disorder in our over-taught, over-sensitive, and over-sedentary women. It manifests itself by hysteria; by spinal irritation; by a lack of nerve-coördination, and by a crowd of reflex symptoms, among which those of a uterine complexion often overshadow, and indeed outlast, all the others.

I have not the time to go into a study of that marvellous kinship which exists between mind and matter; but let me draw this too common picture from life: A young girl who entered puberty in blooming health, with red cheeks and without an ache, is overtasked and overtaxed at school, and her health begins to fail. She loses her appetite, lies awake at night, and grows pale and weak. She has cold feet, blue finger-nails, and perhaps complains of inframammary and ovarian pains. Headache and backache, and spine-ache and an oppressive sense of exhaustion, distress her. Her monthly periods, hitherto without suffering, now begin to annoy her more and more, until they become extremely painful, and at these times dark circles appear under her eyes. Her linen is stained by a leucorrhœa, and bladder troubles soon set in. She is wearied beyond measure by the slightest mental or physical exertion; the short visit from a friend will upset her for the rest of the day; a grasshopper is a burden to her, and she finally becomes very nervous or hysterical. Now, very unfortunately, the idea attached to this group of symptoms is that the womb is at fault. A moral rape is, therefore, committed by a digital or a speculum examination, and two lesions will be found—firstly, as a matter of course, the natural virginal anteflexion, and, secondly, a slight uterine catarrh. These are at once seized upon as the prime factors, and she is accordingly subjected to a painful, an unnerving, and a humiliating treatment for the flexion and the endometritis. Unimproved, she drags herself from one consulting-room to another, until finally, in despair, she settles down to a sofa in a darkened room and becomes the spoiled pet, or the vampire of the family.

Now, Gentlemen, ten to one—yes, a hundred to one, for I speak from a large experience—this overwearied, brain-crammed girl needs a uterine treatment no more than you need one. Her anteflexion is natural; her leucorrhœa merely a passing symptom. She has simply jaded nerves,—worn-out ganglia, and, unless they are treated, and in the way that I shall presently indicate, she is probably doomed to hopeless invalidism.

You will naturally ask me, What is the explanation of such misleading symptoms? What means this headache, this backache, these uterine and vesical symptoms? What is the interpretation of these counterfeits of organic mischief? The precise pathology I cannot pretend to give, for the mystery of life has never been solved, and cerebration and innervation are still the riddles of the sphinx; but I take it to be essentially malnutrition of nerve-centres followed by disturbances in the circulation of the nerve-fluid, and consequently of the blood. The nerve-centres of this brain-crammed girl, or of the worrying, fretting, and grieving women, to whose cases I have just referred, were unable to bear the strain thrown on them, and they broke down. But jaded nerve-centres make poor blood and faulty circulation, and from these come cerebral and spinal irritation and general exhaustion.

Let me pursue the inquiry further, premising that the unknowable can be described only by terms of the knowable. The vaso-motor system of nerves controls the calibre of the bloodvessels. It contracts them and it dilates them. On the equilibrium of these two movements of ebb and flow depends that adjustment of wear and repair which means health. On the other hand, disturbance, in the relation of these two movements is followed by disturbance in the circulation of the blood—circulatory disturbances which consist of local anæmias and local hyperæmias. For instance, what is the blush of shame, but a temporary loss of control over the vaso-motor nerves by which the bloodvessels are dilated—capillary hyperæmia. What is the pallor of fear but another form of loss of nerve-control of greater energy by which the bloodvessels are constringed—capillary anæmia. Thus shame makes us warm, but we shiver when afraid. Imagine now a woman always disturbed by one or the other of these emotions—shame and fear—and you have essentially a very nervous or an hysterical woman. For when all control over vaso-constrictors and vaso-dilators is lost, as I assume it to be in hysterical and nervous women, the same kind of blushing and blanching which we see on the skin is perpetually going on in the internal organs. Hence, the stable and unstable congestions and anæmias of certain localities; hence, the flashes of heat and the shivers of cold which these cases complain of; and from these alternate conditions come cerebral and spinal irritation, with headache and backache, and utter weariness. The brain blushes, and headache and wakefulness ensue; it blanches, and the patient is drowsy and heavy with cervical exhaustion. The stomach blushes or blanches, and symptoms in accordance with each condition arise; hence we get gastralgia, flatulence, capricious appetite, and nervous dyspepsia.

Some organs blush more than they blanch. Thus hyperæmia, or passive congestion of the lower portion of the spine is often constant, causing backache and loin-ache. The womb and its annexes, being exacting organs in menstrual life, bear the brunt of the circulatory disturbances, and are usually blushing. The consequence is swollen, tender, and prolapsed ovaries, and congested wombs, with flexions and dislocations, with menorrhagia and leucorrhœa. But they also blanch, and amenorrhœa or scant menstruation results. Also, active neurosis of the uterine group of nerves takes place, with either local or reflex manifestations, which mimic grave structural lesions of the womb itself or of distant organs. From increased reflex irritability comes spasm of the circular fibres of the cervical canal, causing dysmenorrhœa. All the sphincter muscles are liable to spasmodic contraction, and thus arise such mimicries of organic injury, as loss of voice, dyspnœa, palpitations of the heart, irritable bladder, painful rectum, and difficulty in swallowing, in defecating, or in urinating. Thus are explainable those puzzling cases in which the womb is in its natural position, and of its natural size, in which the sound readily enters, in which no lesion is appreciable, and yet painful menstruation, and backache, and bearing down, and weariness are complained of. So can we explain many cases of neuralgic ovaries. In these diseases structural changes cannot always be found, and yet they are so stubborn as to be shunned by all physicians.

Sometimes there will exist a concurrence of essential and primary uterine disease, with secondary nerve-exhaustion, the former begetting the latter. We see this often in women hurt and worn-out by child-bearing, or in women exhausted by sexual excess. In these cases there will be an exaggeration of the uterine symptoms, a localized hysteria. There will also be very commonly an hysterical bladder, mimicking vesical catarrh, and even stone; sometimes, indeed, a hysterical coccyx aping every symptom of traumatic coccygodynia. For hysteria is liable to billet itself upon maimed portions of the body, and especially on those organs—such as the womb and bladder—which hold an emotional kinship with the brain. This kinship between the brain and the bladder some of you will keenly appreciate on examination-day. Then, again, from the hyperæmia and dysmenorrhœa, developed by the neurosis, we may get secondary structural lesions, such as metritis, endometritis, and displacement, which may need a local treatment beside the general one. But apart from these cases and those which clearly start from antecedent mischief to the reproductive apparatus, no good comes from local treatment. Nor do they respond much better to ordinary therapeutic measures. They stand, as a class, by themselves and need a special treatment, which I shall soon describe to you.

Manifold are the causes of nerve-exhaustion and of its close ally, hysteria, with its mimicries and counterfeited symptoms. The most common factors are those which produce fret, worry, or grief; in other words, mental wear and tear. These are: crosses in love, disappointed affections, illmated marriages, skeletons in the closet, reverses of fortune, mental over-strain, the prolonged nursing of near and dear friends, and the loss of them by death. Absurd as it may seem, three of my patients were wholly prostrated by the building and furnishing of their houses; while one of my patients invariably takes to her bed when she dismisses a servant and engages another. Few school-teachers wholly escape this form of disease, and many of their pupils suffer from the brain-cramming, and the buckram proprieties of the boarding-school. The cause of break-down in the health of several of my patients was remorse at having used means to prevent conception, and, in one, at having resorted to criminal abortion. The climacteric with its nerve perturbations is responsible for causing this disease, and so also are sterility and sexual excess. The over-worked and the under-fed also suffer; but it is not over-work that breaks down the nervous system so much as the causes of over-work—the failures and disappointments of life, its carks and its cares. Life is big with shattered hopes and wrecked ambitions, and life is, therefore, full of shattered nerves.

What are the symptoms of nerve-exhaustion? Their name is legion, but the most common ones are those which tradition has labelled as the symptoms of womb disease, such as difficult locomotion and a bearing down feeling, headache and backache, pain in the left ovary, and spinal irritation, weariness and wakefulness, cold feet, and an irritable bladder. The sense of exhaustion is a remarkable one; the patient is always tired; she wakes up tired, she passes the day tired, and she goes to bed tired. Other symptoms not quite so common are the cerebral ones, such as low spirits, bad dreams, nightmares, and night-terrors; explosive sounds in the head, a loss of

memory, the fear of impending insanity, the dread of being left alone, or of being in a crowd; inability to protrude the tongue, weakness of vision, morbid keenness of smell or of taste, and spinal chills and locking of the jaws produced by the lower or the tremulous notes of the organ. This last symptom occurred in several of my patients, and prevented them from going to church. The uterine reflexes are: uterine, pelvic, and ovarian aches, pendulum pains swinging from one ovary to the other, and a feeling that the abdomen needs support, which is often given by pressure with the hands. The abdominal organs display their interest in the general neurosis by flatulence, by the swallowing of wind like a cribbing horse, and the belching of it in large and noisy volumes, by nervous dyspepsia, nausea, or vomiting, by either diarrhœa or costiveness, usually the latter; and by great exhaustion after a movement of the bowels. One of my patients had, to her great mortification, an urgent movement of the bowels whenever she received a letter from her husband; another one, when the door-bell rang, or when a friend called on her. Some patients are annoyed by clammy hands and feet, or weakened by profuse sweats, often unilateral. Others are frightened by cramps, or by tinglings, by loss of sensation, or by numbness in the extremities, which are deemed the percursors of paralysis. Abnormalities in the sexual feeling are not uncommon. In some all desire is absent, or coiton is painful; in others the sexual feeling is increased; in yet others it is urgent, but cannot be gratified; in a few the dreams are erotic.

For the treatment of this disease we are indebted wholly to one of our Trustees, Dr. S. Weir Mitchell, and to him we owe a large debt of gratitude for teaching us how to cure cases which had hitherto been the opprobrium of the profession. In the treatment there are five ends to be secured—nutrition, sleep, rest of body and of mind, freedom from pain, and an equable circulation.

The question of nutrition is an important one, because these women are either wholly without appetite, or they reject wholesome food. Repair not equalling wear, the starved brain cannot repose, and the starving nerves clamor. By beginning the treatment with iron, with malt, and with a diet of skimmed milk, usually, after a week's time, the patient begins to crave solid food. Fixed rations of wholesome food at fixed hours are now given, together with as much new milk between times as the patient can possibly digest, and it is wonderful how much food a delicate woman can soon dispose of. A goblet of milk is always given at bedtime, so as to distract to the stomach the morbid self-attention of the brain. Also for its soothing and hygienic effects the patient's body is bathed every day by the nurse. By these simple measures fat is rapidly made, sleep is induced, and nerve pains are allayed, in invalids who have been reduced to the last degree of emaciation, and who have hitherto resisted every kind of treatment, even a local one for supposed or for real uterine troubles.

Seclusion is indispensable, first to free the mind from care, and next, to remove the invalid from the injurious home environment. There, surrounded by an atmosphere of injudicious sympathy, her whims are pampered into an unhealthy importance, and her slightest caprices anticipated. There, her counterfeits of uterine disease, her mimicries of organic hurt, are nursed into realities, and there she rules as an autocrat. From this exalted position she must be dethroned. Again, seclusion puts the patient wholly under the control of her physician, a matter of vital importance, for there are no hard and fast rules of treatment for restoring these women to health. Each case stands by itself; each case is a study; each has an individuality to which the mental treatment must be adapted, and the personal magnetism of the physician can alone supply the missing nerve link between will and action. To maintain the needful authority over his patient requires the greatest tact, the greatest alertness on the part of the physician. Sometimes he must soothe, and praise, and comfort. Sometimes, imitating the example of the Good Interpreter, who first pulled Christian out of the Slough of Despond and then scourged him well for getting in, the physician must rescue his patient from a relapse and then scold her for it. When the character is passive and the will limp the task is easy. Far otherwise is it with strong wills, with the wilful, when a bright and intellectual woman, as she too often is for my comfort, chooses from the start to set herself in battle array. The treatment then becomes a trial for mastery; it is brains pitted against brains, and the physician has to put more and more of himself into the encounter, until he begins to doubt very much whether he has any *more* left. Often have I lain awake wondering what next was to be done to save myself from the humiliation of a defeat or of a drawn battle. Often, when crossing the threshold of some room in my private hospital, have I, with my mind's eye, seen my patient draw her rapier and stand on guard, ready to parry or to thrust. Discipline in the end usually triumphs; but the wear and tear of such a case is telling on the physician. Knowing these facts from personal experience, and acting upon them, I have generally treated my patients away from home. Sometimes I have compromised the matter by putting the patient and her nurse in a third-story room at home, but, as it were, under lock and key.

The therapeutic effects of massage and of electricity on the circulation are very striking in nerve-exhaustion; but, while very analogous in their action, they need a somewhat extended explanation. The four principal movements of massage are:

1. Stroking, friction, or surface rubbing.
2. Kneading, or deep rubbing.
3. Tapping, or percussion.
4. Passive and active motion, by movements of flexion, abduction, adduction, and rotation, the patient either being passive or resisting.

The first two pleasantly stimulate into action the vaso-motor nerves, and the terminal filaments of cutaneous nerves. They also exercise the muscles without volition, and, therefore, without expenditure of nerve-force. Electricity does the same thing. Now this is a very important item in the treatment, for all voluntary muscle-work is nerve-work, and the nerve-capital in these cases is too small to be drawn upon. Percussion made by quick strokes with the ulnar margin of the palm, or with a wet towel, or with two rubber balls mounted on whalebone stems, temporarily stuns the nerves; and these surprises effect molecular changes, by which lax fibre and tissues of loose consistency are strengthened. Again, both massage and electricity raise the body temperature, stimulate the nervous system, promote the secretions, and increase the peristaltic action

of the bowels. Also the new and sharp impressions of electricity break up, as Anstie has shown, the mental attitude of morbid concentration on the hysterical or the pseudo-neuralgic pains.

Thus these two agents not only act as antidotes to the evils which come of prolonged rest, but they meet several important indications. Further, the assumption having been made that in these cases there is disturbed circulation as well as enfeebled innervation, it follows that when a pathological process is set up by an increased flux of blood to an organ, whatever tends to lessen the amount of blood flowing to it tends also to restore it to health. Now, both electricity and massage increase surface circulation in the large vascular district of the skin; they flush its shallow arterioles. Again, by irritation of vaso-motor nerves, they also produce reflex changes in the circulation of deeper parts. But increased capacity in one vascular district causes lessened capacity in another. Hence the flux of blood is diverted from the blushing, or congested organ, and its circulation is lessened. Causing in this manner anæmia of the brain, sittings of massage or of electricity are often followed by sleep.

In all my cases the interrupted current was most commonly used, the galvanic current being reserved for stubborn and deep-seated pains. In a large proportion of these cases there was more or less of anæsthesia in one leg—usually the left—accompanied by burning and cutting pains radiating from the corresponding ovary. Faradic excitability was at first always enfeebled on the affected side, but after several applications the muscles began to respond to the current, and motility was restored. In not a single instance did these nerve lesions last long. The ovaralgia was, however, not so readily overcome, but it was very interesting to watch how surely it was rubbed out and faradized out—in fact, extinguished.

The foregoing treatment was the one to which our patient of to-day was subjected, and to which she so marvellously responded. Of local applications she had but four, and these were made more for the moral effect than for any hygienic purpose.

This treatment answers admirably also for the spurious womb-ails and nerve perturbations of the climacteric. Nothing so surely controls the heats and chills, the shiverings and sweatings, the nerve-tinglings and emotional explosions, so common at the change-of-life. Of course, it would be unreasonable to suppose that all local treatment is to be excluded from the Rest-cure, as it is technically called. Putting a woman to bed cannot cure a torn cervix, or a cervical stenosis, or an acutely bent womb. But, what I claim for it is, that it has in my hands cured granular erosion, menorrhagia, intermenstrual ovaralgia, prolapsed ovaries, coccygodynia, and most of the diseases arising from passive congestion. It certainly is a specific for amenorrhœa, or for scant menstruation, and also for dysmenorrhœa when not dependent upon a sheerly mechanical cause. While in the treatment of the reflex uterine symptoms of nerve-exhaustion, nothing can compete with it. The lesson, then, which you will take home with you to-day is, that urgent uterine symptoms are not always evoked by uterine disease, and that there exist many nerve-counterfeits of uterine disease.

ORIGINAL ARTICLES.

A CASE OF SUBSPINOUS DISLOCATION OF THE HUMERUS. REDUCTION ON THE FIFTY-NINTH DAY.

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N. O., white, aged 16, was admitted to the University Hospital on April 7, 1884, with the following history: On February 12th was thrown from a horse and received an injury to the right shoulder. He does not know exactly how he fell, but thinks he caught on his hands. The physician who saw him diagnosticated a dislocation of the shoulder and reduced it. (?) At the end of six weeks the patient's arm was immovable, and he applied to Dr. Riggs, of Howard County, who transferred him to the care of Dr. William J. Jones, of Baltimore, who recognized a subspinous dislocation of the shoulder, and attempted reduction under chloroform. Having failed, he recommended the patient to enter the hospital.

The diagnosis made by Dr. Jones was readily verified. The shoulder was swollen and painful, and there was extensive ecchymosis in the axilla and along the side adjacent. The acromion and coracoid processes were quite prominent; the head of the humerus could be felt resting in the subspinous fossa of the scapula, below the juncture of the middle, with the outer third of the spine. The line of the humerus passed upwards and backwards to the prominence due to the head. The bone was somewhat rotated inwards, the forearm resting obliquely across the belly. The patient could raise the hand no higher than about to the nipple, and could not rotate the humerus. The parts were firmly adherent to each other, although slight rotation could be effected by the use of some force, and the head of the humerus could be seen to roll under the skin A distinct sulcus was visible between the prominences due to the head and the acromion process. The shoulder was ordered to be well shampooed with Stokes's liniment—twice daily.

On April 11th, in the presence of my colleague, Prof. L. McL. Tiffany, and Dr. Geo. Ellis Porter, of Lonaconing, Md., chloroform was administered and reduction attempted. The arm was first moved in various directions with the intention of breaking up the adhesions, which were found to be very strong. Later, Sir Astley Cooper's manipulation—elevation and external rotation—was tried, but in vain. Then traction was made in all proper directions. Gradually the head of the humerus was made to approach the glenoid fossa, and finally to come partly under the acromion. It was found that now the hand would rest on the opposite shoulder, with the arm pressed to the side. The contour of the shoulder was, however, not normal. The prominence of the acromion and coracoid had disappeared, the sulcus between the head of the humerus and acromion became obliterated, but there was too much outward and backward prominence to the

head of the bone. We concluded that the presence of adventitious tissue between the humerus and glenoid fossa prevented absolute reposition, and so the arm was strapped to the side, with the hand on the opposite shoulder, and a continuance of the shampooing with liniment ordered.

On the next day there was considerable swelling of the shoulder noted, but the patient suffered little or no pain. On April 15th the boy displayed considerable freedom of movement and expressed himself as feeling better than he had felt since the accident. He could voluntarily place the hand of the affected side on the opposite shoulder without aid from his other hand, though the effort caused him some difficulty. He could perform no rotatory movements. He could not be induced to remain longer in the hospital, and was discharged with instructions to keep his arm bandaged to his side for a week or so, and to return if he failed to improve.

I heard indirectly from the patient from time to time, and finally had the opportunity, on October 9th, to study his condition. My note is as follows: There is considerable emaciation in the neighborhood of the shoulder, especially below the spine of the scapula. The infraspinous fossa seems to contain no muscle. The supraspinous fossa is about as full as the one on the opposite side. The head of humerus is immediately under the acromion process, though placed somewhat posteriorly as compared to the opposite side. The coracoid process is rather prominent —a condition at least partially due to atrophy of the pectoralis major and deltoid. He can place right hand on left shoulder, keeping the arm against the body, with perfect ease; and can place hand on head, with effort. There is but slight motion between the head of humerus and the scapula, the rotatory movement being almost nil. He is able to do farm work and make full wages. He reports his shoulder as constantly improving, though I doubt if he will ever regain the power of rotation.

This reduction was effected on the fifty-ninth day after the dislocation occurred, and the amount of usefulness restored to the arm, after so long a time, is rather remarkable. According to Prof. F. H. Hamilton's researches, there is only one other case on record in which reduction was effected after so long a time—that of Sédillot, who reduced a luxation of this kind one hundred and fifteen days after the occurrence.

The lesion presents ordinarily no especial difficulties in diagnosis or treatment. Its rarity, however, and the length of time which in my case elapsed before treatment was instituted, make it, I hope, sufficiently interesting to be placed on record.

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OBSERVATIONS UPON THE HYDRO-CHLORATE OF COCAINE, WITH SOME SPECIAL STUDIES UPON ITS EFFECT ON ACCOMMODATION.

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CLINICAL ASSISTANT AT THE EYE AND EAR CLINIC, CINCINNATI, O.

THE recent discovery of unsuspected and highly valuable properties in the alkaloid of the erythroxylon coca, and the subsequent very numerous and interesting observations and experiments of American surgeons and ophthalmologists, have speedily made widely known to the general profession the name and claims of the hydrochlorate of cocaine.

The physiological action of drugs is always an interesting study, fraught with many valuable hints, but the practitioner demands a thorough testing, clinically, of every agent he is asked to adopt and especially of one that claims to be a specific.

Observations, therefore, made upon the action of this new remedy at a clinic having a large daily attendance might not be uninteresting or uninstructive, and will also aid in corroborating, adding to and modifying statements advanced by numerous observers concerning its action.

The following summaries of cases are taken from the records of Dr. Robert Sattler's Eye and Ear Clinic held at the Miami Medical College of Cincinnati:

A careful personal study of cases and of the notes of those of his clinical assistants, to whom he assigned the duty of minutely observing the effect of the new anæsthetic when applied to the pathological or physiological eye, has led Dr. Sattler to the following generalization of results, in the main supporting the statements of other observers, but arrived at independently:

The preparation used was a five per cent. solution of cocaine hydrochlorate.

I. The instillation is followed in every case by more or less smarting and burning, which soon gives way to a feeling of coolness.

II. In from three to fifteen minutes impairment of the sensibility of the cornea, followed by a period varying in duration during which all reflex irritability is lost or temporarily abolished and anæsthesia of the anterior superficial structures of the eye appears complete. This period varies and averages about one hour and a quarter.

III. During this period all reflex irritability is lost. The cornea can be touched with unyielding substances, paper, wood, the point of a knife, etc., and active spasmodic movements of the eyelids or profuse lachrymation, the almost invariable concomitants of reflex action, are not observed.

When the non-cocainized eye is touched the blepharospasm and lachrymation are conspicuous, and afford the best illustration of the interruption of reflex movements in the fellow or cocainized eye.

IV. Transitory mydriasis variable in degree and duration. In eleven normal cases it was never complete or fixed; even with maximum dilatation, corresponding to the period of complete anæsthesia of the superficial structures, more or less response to light is observed.

The excursions of the pupil of the cocainized eye, the fellow eye securely closed, become more and more restricted, but response to light is never completely abolished.

The associated pupillary movement, the fellow eye uncovered, was not interrupted, but only modified in that the excursions were restricted. The movement of the iris of the cocainized eye was greater than when it was tested separately.

In monocular accommodation, the excursions of the pupil in response to the accommodative act are more restricted, and for a short period, corresponding to the stage of most marked anæsthesia, may be interrupted. In binocular accommodation, however, one eye cocainized, the response is more active, but persistent effort at reading again results in more marked dilatation and clonic spasms.

V. A peculiar pallor of the conjunctiva and whiteness of the sclera, together with contraction or diminished prominence of the bloodvessels of the conjunctiva.

VI. The accommodation of the cocainized eye is *sometimes* modified. This modification, when it occurs, is a recession of the near-point. It is not constant, occurring in something less than two-thirds of the cases. A proof that the accommodation of the eye is not seriously affected is the absence of all inconvenience from the dilatation in walking, projection, etc.

VII. Ophthalmoscopic examination revealed nothing.

For convenience of study, the observed cases may be divided into:

1st. Those in which the effect of the drug was noted in the physiological eye.

2d. Those in which its analgesic effects were noted in cases of trauma, inflammation, etc.

3d. Those in which its anæsthetic properties were tested in painful operations.

The physiological eye. Five per cent. and two per cent. solutions of the hydrochlorate of cocaine were used. Certain constant effects follow the use of the drug, such as anæsthesia corneæ, mydriasis, blanching of the sclera, and dryness of the conjunctiva.

The anæsthesia comes on in from three to fifteen minutes after the first instillation, the period of complete anæsthesia *preceding* the period of maximum dilatation of the pupil.

Its duration is variable, the shortest noted being twenty-five minutes, the longest two hours and a half—the average of eleven cases being one hour and fifteen minutes.

Mydriasis comes on in from eight to twelve minutes after the first instillation. Its duration is exceedingly variable. In one case it had passed away within an hour. In the greater number of cases it lasts about twelve hours, and in some few it still existed, in no slight degree, after the lapse of twenty-four hours.

Blanching of the sclera and contraction of the superficial vessels were very noticeable in all the cases.

In regard to the effect produced upon accommodation, the observations made at this clinic differ in some respects from the findings reported by other observers. It has been the universal statement that accommodation was to a greater or less degree affected in all cases, the near-point receding to a noticeable degree.

Careful observation in eleven cases has given us the following result:

In *five* cases—one myope, æt. 46; one hyperope, æt. 24; three emmetropes, æt. 28, 26, and 22—there was *absolutely no disturbance of accommodation.* In one of these cases the cocaine had been instilled into both eyes.

In *four* cases—one hyperope, æt. 23; three emmetropes, æt. 25, 26, and 24—when an effort of accommodation was made, the near-point receded slightly, but *a few moments' effort could again restore distinct vision.*

In *three* cases—two hyperopes, æt. 24; one hyperopic astigmatic, æt. 23—accommodation was seriously disturbed, the near-point being noticeably removed beyond its usual position.

This disturbance of accommodation rarely lasts beyond an hour and a half. The effect of a two per cent. solution seems to be about one-third less than that of a five per cent.

The unanimity of other observers in declaring that the disturbance of accommodation is constant has urged us to more than usual care, and as an example of the points inquired into, and the minuteness of the observations, I submit the following notes of cases:

CASE I.—Hyperopic astigmatic, 0.75 D., æt. 23. Instillations at 0, 5, and 10 minutes of a two per cent. solution into both eyes. Before instillation near-point = 4 inches. The sensibility of the cornea was diminished in five minutes, and completely abolished at the end of ten minutes, continuing in this condition, however, for only five minutes, at which time the sensibility began to return, being fully restored in forty minutes from the beginning of the experiment.

Dilatation of the pupil was first noticeable in five minutes. It had reached its maximum in fifteen minutes, at which point it remained for nearly two hours, when a slight and gradual decline was noticed. At the end of eight hours a noticeable mydriasis was still maintained. During the entire period the pupil yielded a decided though sluggish response to light. In seventeen minutes the near-point had receded an inch and a half. In half an hour it had yielded half an inch, and at the end of an hour it was again restored to four inches.

CASE II.—Hyperope, 1 D., æt. 26. Before instillation near-point = 5 inches. Instillations of a two per cent. solution at 0, 5, and 10 minutes into both eyes. Mydriasis was first observed in seven minutes, reached its maximum in twenty-five minutes, and continued without diminution for eight hours, at which time it began to decline, and had disappeared by the fifteenth hour. The pupil responded sluggishly to light, and contraction was followed by clonic spasms. Anæsthesia appeared in five minutes, reached its maximum in thirteen minutes, continued unabated for forty minutes, and had disappeared within an hour. At no time did there appear a recession of the near-point, though, perhaps, the pupil hardly responded to the accommodative act with its normal extreme rapidity.

In one case, in which there was a high degree of myosis from the internal use of morphia, mydriasis was induced in twelve minutes by the local use of cocaine in the right eye. The contrast between the pupils of the two eyes remained marked for several hours.

The ability of cocaine to overcome the action of the myotics we find also in the following case, which had an exact counterpart:

CASE III.—Instillation into the left eye of a drop of a solution of eserine salicyl. (gr. j to ℥j). Twenty minutes thereafter pupil markedly contracted. Within the course of the next twenty minutes four instillations of the five per cent. solution of cocaine hydro-chlorate.

Ten minutes after the first instillation of the cocaine, and thirty minutes after the application of the eserine to the eye, there was complete corneal anæsthesia, though a strongly contracted pupil. In one hour from the instillation of the eserine, forty minutes after the first instillation of the cocaine, the pupils of the two eyes corresponded. In one hour and a half there was neither myosis, mydriasis, nor anæsthesia.

Cases of trauma and inflammation.—The great value of cocaine as an analgesic may be observed in the following cases:

CASE IV.—Male, æt. 28. Extensive burn of cornea and conjunctiva; foreign bodies under lid. Great pain, blepharospasm, and lachrymation. Three instillations of a five per cent. solution in the course of half an hour. Some pain on removal of foreign bodies; blepharospasm and lachrymation entirely suspended. On the two succeeding days, pain, which was not controlled by atropine, and blepharospasm were relieved by three instillations of the cocaine in the course of fifteen minutes.

CASE V.—Male, æt. 21. Conjunctivitis granulosa, subacute, keratitis superficialis; blepharospasm and lachrymation even when eye is covered with a shade. Two instillations of a five per cent. solution of cocaine in the course of five minutes, at the end of which pain, blepharospasm, and lachrymation had disappeared.

The following day the patient presented himself with the same symptoms, and, after two instillations in the course of ten minutes, was afforded the same relief from pain, spasm, and lachrymation as before.

CASES VI.–IX.—Four cases of conjunctivitis granulosa chronica. Eight minutes after the instillation of a five per cent. solution of muriate of cocaine, cupric sulphate in substance was applied to the diseased conjunctiva, which was allowed to remain unwashed. Patients all complained of an intense smarting in a very short time, and stated that the pain was worse than when the anæsthetic had not been used, but the copper washed from the conjunctiva after use.

CASES X.–XI.—Conjunctivitis granulosa. Eight minutes after instillation of a five per cent. solution of muriate of cocaine, a solution of argent. nitras (grs. vj to f℥j) was applied to the conjunctiva, which was allowed to remain unwashed. The results were identical with those of the four cases in which the cupric sulphate was used.

The application of the strong astringent in these cases was not followed by the immediate pain, spasm, and lachrymation which we usually observe, but for the space of at least one minute pain and spasm were absent and lachrymation suspended. The usual reflex symptoms then appeared, however, with increased intensity.

CASE XII.—Man, æt. 57. Indolent ulcer of the cornea. Three instillations of a two per cent. solution of muriate of cocaine in the course of twenty minutes. The ulcer, which was circular in shape, and measured fully three lines in diameter, was then touched with pure carbolic acid without the patient experiencing the slightest pain.

The following day the cauterization was repeated in the same manner and with the same results.

CASE XIII.—Man, æt. 69. Epithelioma at the outer canthus of the left eye. The ulcerated surface of the cancer was pencilled with a two per cent. solution of muriate of cocaine three times in the course of twenty minutes. A portion of the growth was then excised and the remainder scraped, the patient complaining of not a little pain.

As an anæsthetic in painful operations.—It is as a local anæsthetic that the muriate of cocaine appeals most strongly to the regard of the ophthalmic surgeon. As bearing upon this class of our studies, the following cases are submitted without further comment:

CASES XIV.–XVII.—Four tenotomies of the internal rectus for correction of strabismus convergens. In two cases three and in two cases four instillations of a five per cent. solution were made in the course of twenty minutes. In no case was there any reflex spasm of the orbicularis when the speculum was introduced, nor was any pain felt when the conjunctiva was seized by the forceps and cut with the scissors. In two cases the conjunctival wound was remarkably dry at first and for some little time was free from hemorrhage In all cases pain was felt when the tendon was cut.

CASES XVIII.–XIX.—Two cases of iridectomy. In one patient, a boy, æt. 8, three instillations, and in the other, a woman, æt. 40, four instillations of a five per cent. solution were resorted to in the course of fifteen minutes. In both cases, before the operation was begun, the anæsthesia corneæ was complete. In the case of the boy, there was marked blepharospasm upon the introduction of the speculum and pain was complained of throughout the entire operation. Immediately after the operation, anæsthesia corneæ was already partly lost. In the woman, there was no blepharospasm when the speculum was introduced, but pain was complained of at all subsequent stages of the operation, which was followed by violent and persistent nausea and vomiting, lasting for some thirty-five or forty minutes. At no time, however, was the heart's action depressed.

CASE XX.—Man, æt. 40; pterygium l. e. Five instillations of a five per cent. solution of muriate of cocaine, in the course of forty minutes, without informing the patient of its anæsthetic properties. The pterygium, a remarkably broad one, was removed *without the patient experiencing the slightest pain*, which was a great surprise to him, as he had anticipated a most painful operation. The introduction of the first suture toward the caruncle was not felt; but the second, near the cornea gave rise to some slight pain. The sclera was remarkably blanched and the conjunctival wound, though of considerable extent, was free from moisture and hemorrhage.

CASE XXI.—Small piece of coke imbedded deeply in left cornea. Eye very irritable, the result of re-

peated attempts at removal—four days' duration. Cocaine instilled; in five minutes patient expressed himself as relieved; in seven minutes foreign body was removed with speed without suffering.

CASE XXII.—Imbedded foreign body of the cornea; marked circumcorneal injection, great photophobia and lachrymation. Four instillations of a five per cent. solution of cocaine were made in the course of twenty minutes. Circumcorneal injection greatly decreased and photophobia and lachrymation suspended. Foreign body was removed without the patient at all complaining of pain.

To sum up, then, the observations at this clinic, teach us that the hydro-chlorate of cocaine is of value to the ophthalmic surgeon:

1st. As an aid in the examination of painful affections of the superficial structures of the eye—*e.g.*, Keratitis and conjunctivitis phlyctænulosa, burns, abrasions, imbedded foreign bodies, etc., in that it controls spasm and lachrymation.

2d. In ophthalmoscopic examination—it having the great advantage over other mydriatics of not seriously, but very temporarily, and in many cases not at all, affecting accommodation.

3d. In operative interference as an anæsthetic. In the removal of imbedded foreign bodies of the cornea and conjunctiva, pingueculæ and pterygia, in cauterization of the cornea and conjunctiva, in the first steps of the operations for strabismus, enucleation, and, perhaps, in the slitting of the canaliculi. During the preliminary steps also of operations on the cornea—paracentesis and section for iridectomy or evacuation of the lens it is of paramount service in temporarily suspending all the reflex movements invariably attending the introduction of the speculum, fixation of the globe, etc.

ANTIPYRIN—THE NEW ANTIPYRITIC.

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THE purpose of this article is to draw the attention of the profession to a new remedial agent, Antipyrin, which has riveted the attention of the most prominent German physicians during the past summer, and which appears destined as an antipyretic to take the place of quinine, salicylic acid, kaïrine, cold applications and baths. It has been my good fortune to witness personally a number of the observations reported, and I have deemed it desirable to inspire a desire among American physicians to use this remedy, as the experimental stage is evidently past and nothing but a large number of clinical observation is needed to define absolutely the range of its usefulness.

Antipyrin was first produced by Dr. Knorr, of Erlangen, from coal tar. Chemically it is a dimethyloxychinin, an alkaloid. In commerce it is in the form of a muriate. It is a grayish-white crystallized powder, with a weak, tarry odor and somewhat bitter, but supportable acrid taste. It is easily soluble in alcohol and in less than fifty per cent. of lukewarm water, from which it deposits but very slightly on cooling. Alkalies liberate it, iron chloride colors it reddish-brown, potassium chromate causes a yellow deposit, nitrous acid tinges it green, even in a solution of 1 to 10,000. Long exposure to light darkens the powder.

It is prepared (so far, in rather limited quantities) by Messrs. Meister, Lucius & Brüning, and Höchst, of Germany. Both preparation and chemical composition are a secret and protected by patent. The price is about half that of quinine (while the doses used are double).

A series of physiological experiments made by Prof. R. Demme, in Berne (*Fortschritte der Medicin*, Oct. 15, and Nov. 1, 1884), give the following results: Large single doses (for frogs, five grains; rabbits, twenty-two grains) cause death by paralysis in about half an hour, continued smaller doses (frogs half a grain, rabbits seven grains) induce changes in the central nervous system, first irritation, then paralysis. The initial irritation affects muscles as well as vessels (tetanic spasm, rise of blood-pressure). The paralysis is shown by loss of reflex sensibility and, in spite of integrity of the heart, decrease in blood-pressure. Antipyrin belongs therefore to the "general protoplasm poisons," affecting in large doses directly the muscular system (hence paralysis of the heart with the other muscles) and in small continued doses the nervous system. Hypodermic injection of caffein in lesser grades of poisoning will counteract the depression of the heart and nervous system. Demme's experiments do not demonstrate the limit of safety of administration, but lead him to the opinion that single doses larger than three grains up to the end of the first year, seven grains up to the fifth, thirty grains in adults, require careful watching such as is only possible in hospitals.

Antipyrin was first introduced into the practice of medicine by Prof. Filehne, of Erlangen (*Zeitschrift für klin. Med.*, vii. 6). Since then Merkel, Guttmann, Rank, Biermer, Demme, Naunyn, Pribram, Leichtenstern, Riegel, etc., have experimented with it. So far there is very little difference of opinion and all reports are favorable.

As a rule, it has been found that in high fevers it reduced the temperature without evil concomitant results. The fall begins one or two hours after ingestion of the remedy, and its effects last from seven to twenty hours. There is usually no undue perspiration and the rise of temperature following it is not accompanied by a chill, as frequently in kaïrine. Given with normal temperature, it rather raises it.

While this remedy reduces the temperature, it did not seem to shorten any of the diseases for which it was given, with exception of a case of acute rheumatism reported by Demme.

It was given, as a rule, according to the original advice of Filehne, in doses of 30 + 30 + 15 grains in intervals of one hour. The fall of temperature was usually from 3–5° F., sometimes considerably more. It fell after the first dose in the first hour one degree, the same after the second dose. The maximum decrease was usually obtained after five hours and frequently continued until the next day, when it gradually rose without chill.

The duration was found in the Hospital of Prof. Leichtenstern, at Cologne, to be as follows, viz.:

15 grains	antipyrin	per	diem	under	102° F. =	9.66 hrs.
15 "	"	"	"		100° F. =	5.16 "
30 "	"	"	"		102° F. =	10.83 "
30 "	"	"	"		100° F. =	5.4 "
1 drachm	"	"	"		102° F. =	14.12 "
1 "	"	"	"		100° F. =	7. "
1½ "	"	"	"		102° F. =	16.6 "
1½ "	"	"	"		100° F. =	4.2 "

As the temperature fell, so fell pulse and respiration, keeping all their good qualities.

The first fall of temperature was sometimes accompanied by excessive perspiration, which occasionally commenced ten minutes after the first administration. In these cases Reigel gave simultaneously with the remedy $\frac{1}{10}$ grain of agaricin which usually suppressed the sweat without interfering with other effects. Noorden thinks it more advisable to give it 10–15 minutes before the antipyrin; atropine has the same effect, although neither will be absolutely reliable.

Vomiting was occasionally observed to follow the administration of even ordinary doses, but it was not of a sufficiently severe character to induce antipathy against the remedy. Usually they were females, and many of them vomited otherwise also. Demme reports a case of intolerance of the remedy, even in small internal or even hypodermic doses. It was a case of polyarthritic rheumatism, in which afterwards sod. salicyl. was well borne by the stomach. In Biermer's clinic antipyrin was used once, per clysma, in a case of typhoid, but the stomach was intolerant to it. The usual solution was well diluted, caused no pain, and brought about a fall of temperature, with the same quantities as when given per orem. Since then it has been given in the same manner in every case in which it produced nausea.

Dangerous effects were only once observed by Demme, where, in a child two and a half years old with typhoid, two hourly doses of four grains were given by mistake, with rapid fall of the temperature to 94.8° F. and fluttering pulse. Stimulants and frictions with warm cloths, however, restored the child. Pribram also mentions a case of collapse in a tubercular patient with pneumothorax, although only one drachm had been given during the day; the patient had borne this quantity well on two preceding days. May reports a case of collapse in a weak person with small pulse. In neither case was it fatal. Naunyn administered of it one ounce and four drachms in one case, in another one ounce and five drachms in eight days, in another four drachms in twenty-four hours without evil results.

In four cases Pribram found the drug followed by an exanthema—in three resembling measles, and in the fourth it simulated a scarlatina with small spots, which later united on the volar sides of hands and arms appearing like the erythema urticatum. In this case the same eruption occurred on the pharynx, and its duration was eleven days, while in the others three to four. He remarks that the eruption appeared after the remedy had been given for some time and the large doses had been abandoned, and only fifteen to thirty grains were given daily; that in spite of the discontinuation of the antipyrin it did not disappear, but developed still more for several days; that it occurred after the usual reaction of urine on the iron chloride had ceased.

While antipyrin can be diluted readily in the urine of those patients who are using it, it seems to cause no alteration in it as far as presence of albumen or coloring is concerned, although Fr. Müller found a considerable increase of the sulphates after large antipyrin doses. He therefore supposed that antipyrin in the urine is combined with sulphuric acid. In order to demonstrate it in urine, he cooked the latter with HCl, and diluted with water. The addition of a little grain of sodium nitrite colors it green with evolution of gas.

Antipyrin has been experimented with in a number of febrile diseases, although its best effects have been found in abdominal typhus and phthisis.

Biermer, Demme, and Pribram report in detail a number of cases of typhus treated with antipyrin alone, and all with a favorable result. The remedy causes the longest apyrexia in this disease. Although only the temperature and the pulse are visibly affected, as a rule, still usually the duration of the disease was lessened—in one case the number of stools decreased. Usually the sensorium of the patients remained remarkably free, and the appetite, even at the height of the disease, was remarkably good. In no case were there any complications or relapse. In order to hold the temperature experimentally down to the normal height, Pribram used in one case in 7 days 8 drachms in 20 doses, in another in 24 days 4 ounces, and in a third in 6 days 5 drachms. His other 6 cases received doses of from 15 to 30 grains only when the temperature rose to 104°, with an average duration of 25 days in 5; the 6th died on the thirteenth day. At the autopsy he found general parenchymatous degeneration of all the organs in addition to the usual lesions.

In tuberculosis the remedy has had continually good results. Without hindering the progress of the disease it prolongs life by preventing the rapid waste consequent upon the high temperature and the favorable influence it has upon the appetite.

In pneumonia, while it does not cut short the disease, it improves the chances of the patient considerably, and at the same time ameliorates his subjective sensations and lessens the dyspnœa. Large doses seem to be well borne in this disease. In one case 7 drachms of antipyrin were given in 4 days in 19 doses, followed by permanent apyrexia; in another in 1 day 1 drachm in 3 doses, with following convalescence (fifth day); in another in 6 days 6 drachms in 18 doses; in another 7 drachms in 34 doses in 6 days; in another on the seventh (probably critical) day 1 drachm in 3 doses, the total duration being 11 days.

In erysipelas Demme used it in children in 2 cases, and found that while the disease was not stayed, the general condition of the patients remained remarkably favorable—one was caused by contusion of the pustules of vaccine, the other a consequence of intertrigo of the nates. Dr. Alexander reports also favorable results from the clinic of Biermer.

In intermittents, according to Biermer, the fever

could be arrested when antipyrin was given at the outset, *but its reappearance was not prevented.* Given during the height of the fever, even, it shortened it. Naunyn's observations were entirely negative. In one case he gave as much as six drachms in twenty-four hours without effect.

Antipyrin has, further, been used with good results in scarlatina, diphtheria, pleurisy, etc., as an efficient antipyretic. Injections of a one per cent. solution in gonorrhœa were well borne, but appeared to be no more useful than the usual preparations.

Pribram gives the following *résumé* of the effects and uses of antipyrin, which embodies also the views of most of the other observers.

1. It is a reliable remedy to reduce fever temperature and its concomitant ill-effects (pulse, respiration, dry tongue, delirium).

2. It shows its effect in disease where quinine, even in large doses, has none.

3. Its ready solubility, compared to the latter, makes it more desirable.

4. It can be administered successfully per rectum.

5. It is to be preferred to the use of cold water on account of simplicity of application and easy control.

6. It surpasses kairine on account of its prolonged effect and the absence of chills and collapse.

7. It seems to be particularly suited for the treatment of typhoid, phthisis, and pneumonia.

8. It appears to be less effective against acute rheumatism than salicylic acid.

9. In tuberculosis it lessens the loss of weight in advanced cases. It does not influence perspiration.

10. It appears to influence or even prevent the formation or secretion of substances giving the "diazoreaction."

11. Of evil effects we have only sometimes observed vomiting or the appearance of an exanthema. Only in one case we had collapse, which, however, was promoted by other causes. But until further investigations, it will be well to be cautious in its administration, especially in debility of the heart. This latter is not an absolute contraindication, but necessitates the additional exhibition of strong excitants. During the fall of temperature the tension of the bloodvessels increases.

12. We may, therefore, considering everything, pronounce antipyrin as a useful addition to the materia medica.

13. Concerning the mode of administration, it will be well, for the present, to follow Filehne's advice to give, in the afternoon, thirty grains, and then, as requisite, hourly doses of fifteen grains for adults in all diseases of pronounced type, as generally it is not necessary entirely to suppress the fever, but only to prevent the evil effects of continued high temperature. In tuberculosis, when the type is frequently inverted, the hour of administration would have to be changed. Individualization is, however, to be practised in every case.

¶ As to the mode of administration, it may be—as casually mentioned above—per orem, hypodermically, or per clysma.

The doses and intervals have been indicated. The form may be either powder or solution. If given in powder, it is best dissolved in wine (tokay), but only at the time of administration; otherwise the coloring matter of the wine is precipitated by the antipyrin. In mixtures, the taste is readily disguised by syr. naphæ or rub. id., or else by the addition to simple syrup of a few drops of spir. citr., spir. meliss., or spir. menth.

Its hypodermic use is discountenanced by some as likely to give rise to local inflammation and abscesses. Rank is, however, particularly in favor of this mode of administration, and summarizes his views on the subject in about the following manner, viz.: Used hypodermically, it causes a more marked and rapid fall of temperature than when used internally. The doses necessary are smaller and less frequent. A solution of 1 : 0.5 aq. is to be preferred; the place of injection the gluteal region. Hypodermic application causes neither general nor local derangement. It is to be preferred, except where rapid fall of temperature may be dangerous, as in children or weak persons.

As to its administration per rectum, it has been mentioned above.

The sources from which, in addition to my personal observations, the above report was derived, are as follows:

Bericht der deutsch. chem. Gesellschaft, 1884, xvii. *Centralblatt für kl. Medicin.*, 1884, 36. *Zeitschrift für kl. Medicin.*, 1884, Suppl. *Semaine médicale*, 1884, 30. *Correspondenzblatt für schweiz. Aerzte*, xiv. 20. *Berliner kl. Wochenschrift*, 1884, 20, 24, 27, 30, 32, 36. *Deutsche med. Wochenschrift*, 1884, 24, 25, 26, 31. *Breslauer ärzt. Zeitschrift*, 1884, 11, 14, 15. *Centralblatt für Therapie*, Sept. 1884. *Prager med. Wochenschrift*, Oct. 1884.

PARIS, FRANCE, November 15, 1884.

MEDICAL PROGRESS.

SUCCESSFUL EVACUATION OF THE FEMUR.—DR. TASSI presented a patient to the Academy of Medicine of Rome on May 25 last, on whom he had successfully operated for persistent osteomyelitis of the femur. The patient, a youth aged fourteen, from Aquila, of good constitution and parentage, first suffered two years previously from commencing osteitis of the internal femoral condyle. In the course of a few months, the pathological process invaded the whole epiphysis, and an abscess formed at the lower opening of the Hunterian canal. On the patient's admission into the Ospitale S. Giacomo, on January 8, 1884, with acutely urgent symptoms of purulent osteomyelitis, free exit was given to a subperiosteal abscess, and two large drainage-tubes were introduced. The inflammatory symptoms having subsided, the patient was placed under chloroform on February 4, and the soft structures freely divided between the vastus internus and the ring of the adductors. A large chasm was then made in the internal condyle, and, with the operator's spoon, the interior of both condyles and of the whole epiphysis was evacuated as far as the periarticular shell. It then became easy to evacuate the marrow and to scrape out the bone affected with osteomyelitis, purulent in some parts,

fungous in others. The breach in the bone exceeded five inches in length. The cavity was washed out immediately after the operation, and then filled with very fine iodoform. A plaster-of-Paris apparatus was then applied to the whole limb, leg and thigh included, and only removed once in the course of three months. When the lad was presented to the Academy, the bone was wholly reproduced, there was no ankylosis, and he was in excellent health. Dr. Tassi added that he had at that time three similar cases in process of recovery in his wards in the Ospitale S. Giacomo.—*Lancet*, November 1, 1884.

THE ACTION OF COCAINE.—DR. JOSEF BETTELHEIM, of Vienna, reports the case of a man, 74 years of age, who had atheroma of the aorta, ossification of the coronary arteries, and anginous attacks. For some time he had complained of rectal and vesical tenesmus. Percussion over the bladder showed that it was not sensibly dilated; and rectal examination showed that the prostate was markedly enlarged, and probably the cause of much of the trouble. Cocao-butter suppositories were ordered, each containing gr. ss of muriate of cocaine. One of these being used in the evening, the patient slept well, and was not troubled by his bladder or rectum during the night. This good result continued during the following day. The suppository was then omitted in the evening, with the result that the trouble returned; the second suppository acted in the same manner as the first. From the promptness and efficiency of the cocaine in this case, Bettelheim concludes that the drug will hereafter play an important part in the treatment of painful affections of the rectum and genito-urinary system.—*Wiener med. Presse*, Nov. 9, 1884.

HEMICRANIA IN TABES DORSALIS.—DR. HERMANN OPPENHEIM, at the close of an article on this subject, in which he mentions thirteen cases, draws the following conclusions:

1. Hemicrania is so frequently found in the prodromal and later stages of tabes dorsalis, that the coincidence cannot be regarded as accidental.

2. This complication occurs more frequently in tabes dorsalis of women than of men; of 32 tabetic women 10 complained of migraine.

3. The relations of hemicrania to tabes dorsalis are of different kinds. Sometimes hemicrania will appear as early as ten years before the initial symptoms of locomotor ataxia set in; it comes on more and more frequently, with greater intensity, and of longer duration. In other cases it will appear coincidently with the ataxic symptoms.

4. When a patient complains frequently of hemicrania, it is the duty of the physician to make a close examination in order to ascertain if there are any symptoms of locomotor ataxia; if Westphal's phenomenon be present, but no other symptoms, he is justified in diagnosticating incipient tabes.—*Berlin. klin. Wochens.*, Sept. 22, 1884.

COARCTATION OF THE AORTA.—DR. HALE WHITE presented a well-marked example of coarctation of the aorta at the meeting of the Pathological Society of London, on November 4th. The specimen was taken from a male subject, aged 46, who, during life, had been diagnosticated to be suffering from heart disease; the symptoms being a systolic *bruit*, and some œdema of the lower extremities. At the necropsy, the aorta was found to be so constricted at the point where the ductus arteriosus joined it, that it would only just admit an ordinary probe. The ductus arteriosus had completely disappeared. The aorta, between the left subclavian and the constriction, was so small that the subclavian appeared to be a continuation of it. The thoracic and abdominal portions of the aorta were very small. The collateral circulation was thus carried on. The superior intercostals, very large and convoluted, anastomosed with the first aortic intercostals, which were also very large; the posterior scapulars, both of which came from the third part of the subclavian, divided on the back, at the upper border of the scapula, into two branches, which, reuniting, formed a circle on the back of that bone; from these posterior scapular arteries, branches of great size were given off, which anastomosed with the second, third, and fourth intercostal arteries, close to the spinal column; the right subscapular was extremely large and tortuous, and divided into two branches, both of which joined the intercostal artery in the ninth space; the left subscapular joined the arteries of the ninth, tenth, and eleventh intercostal spaces; the internal mammary arteries anastomosed with the aortic intercostals, the phrenics, and by the superior epigastric branches, which were very large and tortuous, with the deep epigastric arteries; the right superior epigastric artery gave a large branch, which, descending in the suspensory ligament of the liver, anastomosed with the hepatic artery in the liver-substance; small branches of the inferior thyroid artery anastomosed on the longus colli with branches of the intercostal arteries; a descending branch of the profunda cervicis artery, running down on the semispinalis, joined the posterior scapular arteries; the inferior thyroid artery, on each side, was a branch of the common carotid. The deformity in this case, as probably in all similar cases, was due to a faulty development of the part of the fourth left branchial arch which extended from the left subclavian to beyond the ductus arteriosus. The heart, which was also exhibited, showed extreme hypertrophy of both sides; all the cavities were much dilated, the dilatation keeping pace with the hypertrophy. In the apex and ventricular wall was a large patch of fibroid disease. It was pointed out that this deformity was extremely rare; very few cases had been recorded, and only one had been diagnosticated during life. The age to which patients, thus affected, lived, varied very much, for one man had lived to be ninety.—*British Medical Journal*, November 8, 1884.

FACIAL NEURALGIA TREATED BY NERVE VIBRATION.—DR. WILLIAM H. NEALE, of London, reports a case of severe facial neuralgia successfully treated by nerve vibration, or percussion. He used the small, flat ivory disk, with about ninety vibrations to the second, applying it to the primary seat of pain. After an application of about eight minutes the pain at that point had entirely disappeared. The disk was then moved until another painful spo was found, and the percussion again performed. Each day the painful points were sought out and percussed until the patient entirely recovered.—*Practitioner*, November, 1884.

THE MEDICAL NEWS.

A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

COMMUNICATIONS are invited from all parts of the world. Original articles contributed exclusively to THE MEDICAL NEWS will be liberally paid for upon publication. When necessary to elucidate the text, illustrations will be furnished without cost to the author. Editor's Address, No. 1004 Walnut St., Philadelphia.

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PHILADELPHIA, PA.

SATURDAY, DECEMBER 6, 1884.

REMOVAL OF THE FORCEPS BEFORE THE HEAD IS DELIVERED.

IN Dr. Lusk's *Science and Art of Midwifery*, the following passage is found: "Although not generally recommended, it is always my custom to remove the forceps so soon as the chin can be reached by the index finger introduced into the rectum. The extrusion of the head, if it does not occur spontaneously, can then be easily effected, and the blades of the forceps, though of no great thickness, still add something to the distention of the vulva."

The removal of the forceps before the head is born, though recently urged by some others, as well as by Dr. Lusk, is by no means a new practice. In the French translation of Naegele and Grenser, p. 324, the statement is made: "Among the German authors, Boër, and after him Joerg, Carus, and others have recommended the removal of the forceps as soon as the head is engaged in the vulva, unless immediate delivery is required." Madame Lachapelle, criticising the advice of Baudelocque, to protect the perineum with one hand while the other is used to pull upon the forceps, said that, in following this precept, rupture of the perineum was inevitable, because the forceps augmented the volume of the head, more widely separated the labia, hastened the escape of the head, and caused the distention to be much greater and more abrupt. Her practice was always to remove the forceps as soon as the head had escaped from the bony parts. These statements are enough to prove that this practice, "though not generally recommended," is quite old.

But, though old and advised at first by some of the most able of obstetricians, and thus advised again, the practice has never been generally adopted, and its propriety may at least be questioned.

It is worthy of remark that, while some obstetricians would have the instrument removed for the protection of the perineum, others regards its retention as valuable to prevent injury; Kleinwächter and Robert Barnes may be mentioned as holding the latter opinion.

A word first in regard to the common assertion that the blades of the forceps retained upon the fœtal head increase the liability to tearing the vulval opening by increasing the stretching of the latter. The late Prof. Hodge held that when the instrument was properly applied the parietal protuberances projected through the fenestræ of the blades, so that the forceps occupied no space as regards the lateral diameter of the fœtal head, and, indeed, by its pressure slightly lessened this diameter. Petrequin's experiments have proved that if one diameter of the fœtal head is lessened by the compression of the forceps, the diameter perpendicular to it is increased; thus, when the blades of the forceps are applied to the sides of the head the biparietal diameter may be lessened by strong compression, but this apparent benefit is in part, if not completely, neutralized by increase in a suboccipital diameter, so that there may be no absolute lessening of the head plane concerned. Indeed, any compression of the fœtal head more than enough to prevent the instrument from slipping is regarded by most obstetricians as injurious; the best forceps is that which compresses least, is a remark of Poulet recently made. Our faith, then, is with Dr. Lusk, rather than with Dr. Hodge, as to the effect of the forceps adding to the circumference of the head-plane, in so far we believe the former is right in advising the withdrawal of the instrument before delivery of the head. But, as he himself says, this addition is very small; further, it may be in some measure compensated for by an increase in the maximum diameter of the fœtal head if sufficient time is given.

Dr. Hodge condemned the removal of the instrument, as advised originally by Boër, unless in exceptional cases, and one of his arguments against the practice was that the fœtal scalp which protruded through the fenestræ of the forceps' blades—buttoned into them, as it were—would be injured in such withdrawal. But this objection must be regarded as purely hypothetical, and so far has never been sustained.

Another objection to the practice proposed, is that the operation is incomplete; the instrument has been applied for the delivery of the head, but is withdrawn before that delivery is effected, and thus the patient and her friends may be dissatisfied, or discouraged. But this objection is not of any weight

with the conscientious physician—his action must be governed by what he believes to be the true interests of the mother and of the child.

Some other objections are not so easily answered. It may happen that, while the obstetrician is removing the forceps, vigorous uterine and abdominal contraction may expel the child and he is so engaged that he can do nothing for the protection of the perineum. Or again, after the instrument is removed, the expulsion failing, a reapplication is necessary. For these reasons we believe Pinard is right in saying that one ought not to disarticulate the forceps until the head has been delivered, unless the latter has been improperly seized.

Velpeau, who regarded removal of the forceps as often useful, also taught that the surest means of protecting the perineum was to retain the head at the vulva as long as possible, making no traction, if the uterus had sufficient energy to complete the labor.

Certainly the forceps is one of the best of means for keeping the head in the passage until the latter is sufficiently dilated for the safe escape of the former, and also the best of means for securing the passing out of the head in the axis of the vulval opening, and thus contributing to the protection of the perineum.

CONSTITUTIONALITY OF LAWS REGULATING THE PRACTICE OF MEDICINE.

THE matter of the regulation of the practice of medicine and surgery by legislative enactment is daily acquiring more importance and efficiency as the various acts which have been from time to time passed in the different States come to be tested and sustained by the courts.

The most recent case of this kind has been decided by Judge Green, of the Supreme Court of West Virginia, in regard to one Dent, who sought to practise medicine in that State, without the required license, which was refused him because the Board of Health did not consider that the college whence he had his diploma, the "American Medical Eclectic College of Cincinnati, Ohio," came under the word "reputable" as defined by said Board. The defendant having been found guilty in the lower court, and the court having overruled a motion for the arrest of judgment, the former took a bill of exceptions, setting forth that the act "was unconstitutional and therefore void so far as it interfered with the vested rights of the defendant in relation to the practice of medicine." In some half-dozen or more cases quoted by the court as occurring in different States of the Union, this was the point taken in every instance, and has always been overruled, and the constitutionality shown by the application of undisputed principles well settled by numerous decisions.

In view of the increasing importance of a knowledge of this subject to medical men, it will be interesting to explain more fully the ground on which such unconstitutionality is alleged. It is held that the sections defining the conditions essential to obtaining the license to practise, which are similar in the acts of the different legislatures, are inconsistent with article 10 of the amendments to the Constitution of the United States and to section 1 of article 14 of the same amendments, as well as sections in the bill of rights, which are also more or less common to the constitutions of all the States. Perhaps the strongest paragraph out of a number explaining these provisions is the following: "Every wanton and careless restraint of the subject, whether practised by a monarch, a nobility, or a popular assembly, is, to a degree, a tyranny; nay, even laws themselves, whether made with or without our consent, if they regulate and constrain our conduct in matters of mere indifference, without a good end in view, are regulations destructive of liberty." But the courts have ruled that the laws regulating the practice of medicine are no violation of such principles. The legislature of any State has a perfect right, under its general police power, to pass laws placing individuals under restraint in the exercise of any business, calling, or profession, and has exercised it. In accordance with this laws have been made to license bakers and sellers of intoxicating drinks, and the practice of law has been thus regulated in every State, and the same principles apply to the regulation of the practice of medicine.

An amendment passed in 1818 to the Massachusetts Act of 1817 is analogous to section 4 of the Registration Act of the State of Pennsylvania, requiring the faculties of the medical colleges in this State to pass upon the diploma of a graduate of a college in another State who desires to practise in Pennsylvania. The amendment to the Massachusetts act provided that no person practising physic or surgery shall be entitled to the benefit of the law for the recovery of any debts or fees for his professional services, unless he shall, previously to rendering such services, have been licensed by the Medical Society or been graduated a doctor in medicine at Harvard University. This amendment, it was claimed, was unconstitutional, but not because it required a license of a physician before he could practise, but because, in violation of the State constitution, it conferred peculiar privileges upon the Medical Society or Harvard University. But the court in Hewitt *vs.* Charer, 16 Peck, 356, decided that this act was constitutional, saying, "It appears to us that the leading and sole purpose of this act was to guard the public against ignorance, negligence, and carelessness in

the members of one of the most useful professions." And this they treated as legitimate as a matter of course.

In giving the opinion from which the above information is obtained, the learned judge concluded as follows: "It seems, therefore, clear that both on reason and authority we could not do otherwise than hold that all the provisions in section 9 and section 15 of chapter 93 of the acts of 1882 are constitutional and valid, and should be enforced by all the courts." And in this the three remaining judges concurred.

With the numerous decisions in favor of the constitutionality of the various medical acts, there is every encouragement to proceed with the enactment of laws for license and registration, in those States as yet unprovided with laws. One of the most recently proposed is appended to an address by Dr. H. J. Sharp before the Ohio State Medical Society in June, 1884. It is an act to establish a Medical Board of Examiners and Licensers and regulating the practice of medicine and surgery in the State of Ohio. It provides for a board of examiners composed of nine reputable physicians who shall be graduates of legal medical colleges, unconnected with any medical school or college. This board shall hold quarterly examinations, in writing, of all candidates referred to them by the president of the board, but requires also that the candidate be twenty-one years of age, of good moral character, and shall have received a diploma from a legally incorporated medical college. The act very properly does not exempt the graduates of Ohio schools from the examination, as unfortunately do the acts of some other States. For although the favoring of such medical schools seems to be constitutional, as far as determined by State courts, yet there is no equitable reason why their graduates should be thus favored, and the clauses containing them should be speedily rescinded. In other respects, this bill seems reasonable and just, and should commend itself favorably to the Ohio Legislature.

FORMATION OF RED BLOOD-DISKS IN THE LYMPHATIC GLANDS.

IT is generally acknowledged that the spleen and marrow of bones are the seats of formation of the red blood-disks, while the lymphatic glands are the factories of the white or colorless corpuscles. But recently PROF. RINDFLEISCH has reported to the Congress of German Naturalists and Physicians some observations which go to show that the seat of formation of red disks is sometimes partly transferred to the lymphatic glands, which, under these circumstances, are converted into a hæmatoblastic tissue, quite like that of the spleen, including its Malpighian corpuscles. He describes two cases in which this partial conversion had taken place, in which hæmatoblasts, or nucleated red corpuscles were found in the lymphatic glands.

The first case was that of a thirteen year old boy, who was brought for autopsy into the Würzburg Pathological Institute. In addition to the appearances of cachexia, he had a tubercular disease of the knee-joint, which had lasted one year, and a very peculiar condition of numerous lymph and mesenteric glands. The glands in the ileo-cœcal neighborhood, and the chain in the neck were raspberry-colored, and about twice as large as the normal glands. The spleen was not amyloid, but hyperplastic, and normal in hue, while all the bones were filled with fresh red marrow rich in hæmatoblasts, and the fatty marrow was reduced to a mere remnant.

He also found the chyle vessels at the point of their exit from the hilus of the lymphatic glands filled with a thick, red juice, which, in addition to red corpuscles, contained a large number of true hæmatoblasts, while in the parenchyma of the glands he found the same elements. So, too, in the hilus of one kidney he found a large amount of fatty tissue converted into the same hæmatoblastic parenchyma. In the second case he also found a true conversion of the mesenteric glands into splenic tissue.

This very interesting, although, in the light of the recognized functions of the two tissues, not altogether surprising transformation, Rindfleisch believes to be brought about by a condition, of moderate, but persistent, passive hyperæmia.

YELLOW-FEVER INOCULATIONS.

THE latest Paris exchanges give an account of the sitting of the Academy of Sciences, at which M. BOULEY presented the note from Brazil on yellow fever referred to by an occasional correspondent in our last issue. The microbe is stated to be a cryptococcus, and is found in the blood, the black vomit, and the dejections. A large number of inoculations appear to have been successfully made with a mitigated virus, and all of the persons—over 500—so treated escaped the disease. M. Bouley accepts the facts of the vaccination and its protective power, but doubts the characters of the microbe, to determine which he suggested the appointment of a special commission. These observations will naturally excite great interest, and we shall expect shortly to have a more detailed account of them to lay before our readers.

ARTIFICIAL MELANÆMIA AND MELANOSIS.

SCHWALBE, of Magdeburg, has succeeded in experimentally producing melanæmia and melanosis by introducing under the skin of guinea pigs and pigeons, or through the œsophagus into the stomach, sulphide of carbon dissolved in olive or poppy oil, in the proportion of 5 to 10 parts of the former and 95 to 100 of

the oil. In from four to eight weeks there were marked melanæmia, and melanosis of almost all the organs. The blood, and especially the blood of the splenic vein, was rich in pigment cells, pigment flakes, and pigment granules. The spleen abounded in pigment, as did also the kidneys, lungs, and bone-marrow; but in the liver, spinal cord, and thyroid gland the pigment was scanty, although small pigment granules were even found in the intestinal epithelium. The heart was fatty and the seat of numerous blood extravasations and of pigment. In similar experiments Klebs and Tommasi-Crudeli have succeeded in producing pigmentation of the spleen and superior mesenteric glands.

The pathological phenomena here described are precisely those found in persons dying of severe malarial fever with melanosis. In the discussion which followed the reading of the paper before the recent German Congress of Naturalists and Physicians, Dr. Lassar, of Berlin, said he had produced the same results by peritoneal transfusion with the blood of the same animal. They were accompanied by albuminous bile-secretion, by fever, and circumscribed inflammations about the foci of pigment deposit. Lassar thought that since disintegration of the blood could be produced in this and other ways, we are scarcely justified in drawing conclusions from any such experiments as to the nature of the cause of malaria. The only justifiable conclusion is that the cause of malaria and the sulphide of carbon both act destructively upon the red blood-disks.

Such an objection must be admitted to be entirely legitimate. At the same time, it cannot be denied that such experiments and their results bring us a step nearer the truth, and give us a new and advanced starting-point for further investigation.

It is interesting to note, in connection with this discussion, that there was a general disposition, on the part of those engaging in it, to accept the fungus theory of the cause of malaria.

SCIENCE AND LAW.

THE advocates of antiseptic treatment may regard their cause as strengthened by the action of a civil court. A case of this kind was recently presented before a German tribunal: A party having received a wound of the chest, was treated by a physician who, wedded to old ways, used no antiseptic measures, and the patient died of septicæmia; the medical attendant was arraigned, tried, and condemned to a fine for his neglect to use antiseptics.

If such cases as this become common abroad, how soon and how greatly will the field for suits for malpractice be enlarged in this country. If antiseptics are of such importance, a physician can hardly lose a patient from acute or chronic disease if he should fail to use them, without making himself liable to prosecution. Possibly the courts, in their infinite wisdom, may go still further, and decide that it is a crime to die when such means have been used, and, as the arm of human justice is not long enough to reach the departed, it may take vengeance upon his estate and his heirs, claiming the former for the benefit of the public weal.

However, before any such radical step as this is taken, it would be well for the courts to determine what are the best antiseptics, and the best method of using them.

THE WASHINGTON INTERNATIONAL MEDICAL CONGRESS.

ON another page will be found a memorandum of the preliminary proceedings of the Committee charged with the organization of the Ninth International Medical Congress, to be held in Washington in 1887. The selection of Dr. Austin Flint for President and of Dr. Billings for Secretary-General will everywhere be received with general favor. The meeting was fully attended, and the feeling of deep interest and responsibility manifested augurs well for the successful completion of the onerous task which is imposed upon the Committee.

REVIEWS.

THE PRINCIPLES OF VENTILATION AND HEATING, AND THEIR PRACTICAL APPLICATION. By JOHN S. BILLINGS, M.D., LL.D. (Edinb.), Surgeon U. S. A. Pp. 214. The Sanitary Engineer, New York, 1884.

THIS is a book which should be read by everyone who is desirous of gaining the best information in regard to methods of mitigating the injurious effects of winter's cold and summer's heat upon human organisms. In it are furnished the results of a wide experience in grappling with these great sanitary problems, and the knowledge of questions involved which caused its author to be sought for as professional consultant in the construction of the Johns Hopkins Hospital, of Baltimore, is here displayed, matured and perfected by earnest study in England and on the continent as well as in our own country. At the same time Dr. Billings does not disdain to season his severely scientific counsels with an occasional spice of the true Attic salt in such a way as to render even the dryness of heating and the vacuity of ventilation attractive to a general reader.

The work is an outgrowth of a series of letters to a young architect, originally published in the *Sanitary Engineer*, but now rearranged, and in part rewritten, numerous illustrations being added. It does not claim to be a systematic manual, but has for its object the presentation of the general principles which guide us in judging of the various appliances proposed for ventilation and warming, especially of large public buildings both at home and abroad. Among the systems described in detail are those of the New York Hospital, and Metropolitan Opera House; the Capitol at Washington; the Houses of Parliament and the charming little Criterion Theatre in London; the St. Petersburg Hospital, and several other important structures.

SOCIETY PROCEEDINGS.

NEW YORK SURGICAL SOCIETY.

Stated Meeting, November 11, 1884.

THE PRESIDENT, ROBERT F. WEIR, M.D., IN THE CHAIR.

SIMULTANEOUS INCOMPLETE WOUND OF FEMORAL ARTERY AND VEIN; LIGATION IN THE WOUND OF BOTH VESSELS; RECOVERY.

DR. PILCHER presented a man, æt. 34, a butcher, who, in the evening of May 17 last, accidentally stabbed himself with a long, sharp, narrow-bladed knife, the blade entering the upper and front part of the right thigh a little below the line of Poupart's ligament. The overwhelming hemorrhage, which at once followed, was fortunately quickly controlled by pressure at the hands of Dr. N. B. Siner, of Brooklyn, who happened to be within hail at the moment of the accident. This pressure was then assisted by the insertion of a tampon into the wound, until the arrival of Dr. Pilcher later, and thus time was afforded to make the necessary arrangements for the permanent arrest of the hemorrhage. The parts adjacent to the wound were shaven and cleansed, and as full an effort made to conduct the required operative procedures, without septic contamination, as was possible under the circumstances. The original wound was a transverse cut of only three-fourths of an inch in extent. A longitudinal incision of some inches in length was made, extending above and below the stab-cut, while pressure was kept up at the point from which hemorrhage proceeded. The femoral vessels in Scarpa's space having been fully exposed, it became evident that the knife had pierced the femoral vein about an inch and a half below Poupart's ligament, and, having divided its outer half, had also divided the adjacent inner half of the femoral artery, inflicting thus an incomplete wound upon both the main vascular trunks of the limb. While pressure was still directed upon the vein wound, the artery, being compressed above, was completely divided at the point of wound, and the divided ends each secured by a catgut ligature. More difficulty was experienced in dealing with the vein, for although adequate pressure was made upon it, both above and below the wound, the moment the pressure upon the wound itself was intermitted, a most copious flow of blood would deluge the field of operation. The embarrassments of the moment were increased by the dim light, which was but little bettered by the lamp of the ambulance surgeon, who was acting as one of my assistants; and by the fact that the previous infiltration of the region with blood had become such as to obscure much the distinctions between the tissues of the part usually available for the guidance of the surgeon. Further dissection, however, finally revealed two large muscular vein-trunks entering the femoral vein from behind, just opposite the point of the wound. A ligature having been tied about each of these, the further dealing with the main trunk, by severing it and tying separately each end, was accomplished without difficulty. The wound was then irrigated with sol. hydrarg. bichlor., 1 to 1000, and closed with sutures, proper bandaging and compresses being applied to insure union by first intention. Suppuration, however, took place, and on the third day the wound was reopened at its most dependent point, and drainage-tubes inserted, and irrigation resorted to. A sharp attack of cellulitis following the line of the sartorius muscle followed, necessitating several counter-openings for drainage for its control. The patient rallied well from the extreme loss of blood sustained at the time of the accident. After the eighth day his progressive convalescence was assured. His perfect recovery was delayed by the fact that some of the catgut ligatures proved to be irritants and determined circumscribed phlegmons at the points where applied that suppurated. These all finally closed, and on the 2d of July he began again to attend to his business.

Later in July another small phlegmon formed at the site of the lower ligatures, which, however, occasioned only a temporary inconvenience. While lying in bed, no disturbance of the nutrition, nor of the circulation even, in the affected limb was noticeable. After getting up, the tendency to œdematous swelling of the leg was quite marked. This was easily controlled by an elastic stocking, and at the present date has become much less marked.

At no time in the history of the case did any noticeable disturbance in the nutrition of the limb occur. In the early days, after beginning to walk about, there was marked œdema and weakness of the leg. An elastic stocking sufficed to control this. To-day, about six months after the injury, he has used no support to the limb, and inspection shows a barely recognizable tendency to œdema of the leg. During the operative procedures required for ligating the vessels at the time of the injury, neither the profunda artery nor the internal saphenous vein came into view; but it may be assumed that the wounds were below the points where these vessels join their respective main trunks.

Beside the interest attaching to the peculiar nature of the wound itself, and the fortunate conjuncture by which immediate death was averted, special interest attaches to the bearing of the case upon the treatment of wounds of the femoral vein. The history of the case demonstrates the value of diminishing the arterial supply to the limb, when the great vein outlet of the limb has been occluded; but, as a means of controlling the hemorrhage from the vein wound, it has been seen that the ligature of the femoral artery was valueless, for the apparent profuseness of the flow from the vein-wound was not diminished after the artery had been secured.

DR. GERSTER reported a case which occurred in his experience five years ago, and belonged to the class of injuries included in Dr. Pilcher's case. One of his colleagues at a city hospital had removed the inguinal glands from a young man. It was thought later that instead of an eight per cent. solution of chloride of zinc being used, by the mistake of a nurse, a much stronger solution was employed for washing out the wound, at the bottom of which the femoral vein and artery were exposed. Three days after the operation an exceedingly profuse hemorrhage occurred, and the house surgeon did not know better than to throw an elastic bandage around the limb below the point of bleeding, because it was venous blood which poured out of the wound. The constriction was sufficiently strong to compress the

vein but not the artery, and the limb became a reservoir for a large collection of the patient's blood.

Accidentally, Dr. Gerster called at the hospital about two hours after this had occurred. When his attention was directed to the case, he saw that local pressure was being kept up by means of large bundles of dry cotton pushed into the bottom of the wound. Naturally it failed to control the hemorrhage completely. The patient was nearly dead from acute anæmia. Dr. Gerster removed the clots from the bottom of the wound for the purpose of finding the source of hemorrhage, and saw that a piece about an inch long and a quarter of an inch wide, belonging to the anterior wall of the vein, had sloughed out, and through this large opening great quantities of blood had poured forth.

The artery being exposed in the bottom of the wound, his first thought was to adopt Langenbeck's proposal to occlude the femoral artery, which was easily accomplished by pressing it against the pubis. But this did not control the hemorrhage, wherefore the idea of ligating it was abandoned. There remained, therefore, nothing but to ligate the vein itself, and he divided the vessel, as Dr. Pilcher had described, as well as possible while pressure was being constantly exerted upon it above and below, and applied ligatures on both ends. The hemorrhage, however, did not cease, and continued because large muscular venous trunks entered from behind. By the time these were exposed and tied the patient had expired.

Undoubtedly it was not external hemorrhage alone in this case which caused the fatal issue, because one of the largest limbs of the patient was engorged with blood to its utmost, and was not only cyanosed, but was necessarily increased in circumference.

THE CHICAGO GYNECOLOGICAL SOCIETY.

Stated Meeting, November 21, 1884.

THE PRESIDENT, H. P. MERRIMAN, M.D., IN THE CHAIR.

DR. EDWARD WARREN SAWYER opened a discussion on the

TREATMENT OF ABORTION,

by calling attention to the frequency of the interruption of pregnancy before fœtal viability. Madame Lachapelle says abortions are as frequent as labors at full term. The experience of the profession opposes the generalization. In his own practice, extending through a period of ten years, he had only seen from forty to forty-five abortions. As illustrative of the wonderful conservatism and care of nature in these cases, he had never met with a fatal case in his own practice, and had seen but one fatal case in the practice of his medical brothers. This fatal case was complicated by cellulitis and pneumonia.

As to causation, abortions are divisible into two causes: (1) those occasioned by natural processes; (2) those induced by accidental or intentional violence. The former class usually terminates favorably. The latter class is the *bête noir* of the physician. It is a matter of medico-legal interest, that in abortions resulting from natural processes—*i. e.*, fatty degeneration of the decidua—the ovum and decidua are expelled, as a rule, in an intact condition, while in criminal abortion the product of conception is expelled in a more or less mutilated state. When the ovum has been mutilated, the embryo is extruded from the cavity of the uterus, before the fœtal envelopes and decidua, and is frequently lost. Moreover, the embryo, so late as the fourth week, may be completely absorbed. The absence of the fœtus cannot be regarded in the differential diagnosis of abortion, molar pregnancy, or intrauterine fibroids. Two distinct courses, as to the treatment of abortion, have been adopted by the profession. The radical method of immediate evacuation of the contents of the uterine cavity, and the plan of patient waiting, have been, in turn, defended and opposed. Dr. Sawyer has followed the expectant mode of treatment. He waits and allows nature to effect the expulsion of the product of conception. He has waited as long as one week. He has been encouraged in this line of treatment by the fact that he has never seen any untoward consequence in the cases managed in this manner. He enjoins absolute rest in the horizontal position, and the exhibition of quinine and alcohol as required. Local treatment, apart from the vaginal tampon, is limited to vaginal injections of chlorinated soda. He has never noticed hemorrhage or inflammatory action as the result of this course of action. He objects to the removal of the whole or part of the product of conception from the uterine cavity because, (1) it is a painful procedure, involving the use of ether, and predisposing to hemorrhage from uterine inertia; (2) an assistant is necessary; (3) the amount of unavoidable injury to the genital tract is considerable.

In conclusion, Dr. Sawyer exhibited an unusual specimen. The specimen consisted of an intact amniotic sac, enclosing a five months' fœtus, with filamentous insertion of the umbilical cord. Separation had occurred between amnion and chorion, the chorion, placenta, and decidua remaining within the cavity of the uterus. He had been called to see the woman—five months advanced in pregnancy—who was suffering from severe uterine contractions and hemorrhage. After a brief interval the specimen, presented to the Society, was expelled. Noting the intact condition of the amnion, Dr. Sawyer paid no further attention to the mass, told the woman to fear no more trouble, and went home. Next morning, upon visiting his patient, he was informed that one hour after his departure, under renewed hemorrhage and uterine contractions, another mass was expelled. This second mass proved to be the chorion, placenta, and decidua. A medical friend, Dr. Albert G. Paine, had seen an exactly similar case.

DR. W. W. JAGGARD said that separation between the amnion and chorion was relatively infrequent during the sixth and seventh months, but was not uncommon prior to that period. In regard to the treatment of inevitable abortion when the ovum was expelled in an intact or mutilated condition, and decidua or portions of the fœtal membranes remained within the uterine cavity, it was necessary to regard the natural history of the condition. This condition had been appropriately termed by Breslau "incomplete abortion." The terminations are briefly:

(*a*) Spontaneous elimination of that portion of the product of conception remaining within the uterine cavity as the result of retrograde metamorphoses, ac-

companied by intermittent hemorrhages and uterine contractions.

(*b*) Sometimes, though seldom, hemorrhage ceases entirely, and the patient is apparently well. This interval varies from a few days or weeks to months. Suddenly hemorrhage and pain occur, and the intrauterine mass is expelled. This retention, with a long interval of rest, is noticed when the placental or decidual attachments are intact. That this act constitutes the termination of the labor, so to speak, is apparent from the facts, that the milk secretion is usually established at this time, and the reduction metamorphosis is instituted.

(*c*) More frequently the retained decidua or placenta undergoes suppuration, or ichorous changes, as the result of which systemic infection is liable to occur, despite the thrombosis of the uterine sinuses and the proliferative changes in the uterine mucosa.

(*d*) The retained placenta or decidua may become converted into placental or fibrinous polypi—conditions which always require operative interference.

All four terminations present sources of danger to the mother. From this glance at the natural history of the condition—for the elucidation of which Spiegelberg deserves especial recognition—the weight of evidence is in favor of the so-called radical treatment. Empty the cavity of the uterus at the earliest possible period. The plan recommended by Dr. Mundé in the February number of *The American Journal of Obstetrics*, 1883, was worthy of high commendation. One finger within the uterus, one hand on the fundus was preferable to instruments when equally effective. The subsequent treatment was of extreme importance.

Whenever the cavity of the uterus is invaded by the finger, or any instrument, it must be irrigated by some antiseptic solution. Two per cent. solutions of carbolic acid, or one to two thousand of the bichloride of mercury, are efficient in the destruction of conditions favoring decomposition and sepsis. After irrigation of the cavity of the uterus it is a good plan to introduce within the uterus a bacillus of powdered iodoform, weighing at least six grammes. Symptoms of iodoform intoxication rarely, if ever, follow the exhibition of this quantity. Ten grammes are usually required to produce toxæmia.

DR. D. T. NELSON said that the dangers from abortion were (1) hemorrhage, (2) sepsis, (3) inflammation. Rest and opium were not sufficient. He could not rest until the uterine cavity was empty. He had no sympathy with the expectant plan of treatment. The manner of emptying the uterine cavity was of importance. If the cervix was dilated, or dilatable, the cavity should at once be cleaned out with the finger. If the cervix was not dilated, nor dilatable, it should be plugged in the manner indicated by Dr. Adolphus, with tupelo or laminaria tents. If the cervix was partially dilated or dilatable, and the uterus fixed, give an anæsthetic, relax the spasm, and proceed as in the first case. He had no fear of ether predisposing to uterine inertia. In dissecting off the placenta it was advisable to glove the finger-tip with the amnion. In the early months, when the ovum was attached near the cornua, it was necessary to bear in mind the possibility of irregular contraction, and the inclusion within either cornu of a bit of the placenta. The cornua must be thoroughly explored. When he employed intrauterine irrigation—by no means an invariable method of treatment—he used a one-half per cent. solution of carbolic acid, or a dilute solution of ordinary table-salt. The solution must be hot, 110° to 120° F. Hot water, in the absence of carbolic acid or salt, was effective as a cleansing agent, and as inducing uterine contractions. He had had no experience whatever with iodoform, but regarded it as superfluous in all cases.

DR. WM. H. BYFORD said that abortions were more frequent in large cities than in the country. Madame Lachapelle's estimate of the frequency of abortion was not exaggerated when applied to large communities. In the country, he thought, one abortion to three labors at term represented a fair average. Abortion was never a physiological process; although abortions from disease of the ovum were attended with less danger than those resulting from morbid uterine changes. In disease of the ovum, the circulation was impaired, the embryo perished, and expulsion followed with the minimal degree of hemorrhage, pain, and sepsis. When the cause of abortion was external violence, or decidual endometritis, danger in each of these three directions was increased. The specimen exhibited by Dr. Sawyer, was of rare occurrence at so late a period; it was comparatively common during the early months.

As regards the prophylactic treatment, he had observed two clinical facts in connection with the habit of abortion. When uterine contractions were the prominent symptom, abortion could be arrested in many cases by absolute rest and opium. When hemorrhage was severe, all attempts at arresting the process were usually futile. This was especially true during the first three months. At a later period, even when hemorrhage was severe, abortion might be arrested.

In regard to the treatment of inevitable abortion, he had never seen the time when champions of the expectant and radical courses of action did not exist. The treatment must be governed by the consideration of the individual case. In any case, the patient must be carefully watched. He had never seen a case of abortion terminating by immediately fatal hemorrhage. The acute anæmia, however, might induce a condition which would render the woman more susceptible to sepsis, or any intercurrent disease. He feared sepsis and metro-peritonitis more than hemorrhage. He was conservative as to operative interference. Let nature do what she can; only in case of failure on her part interfere. The finger is preferable to any instrument. Then it is not necessary to insist upon the removal of placenta or membranes with mathematical accuracy. If the placenta be grasped by an irregularly contracted uterus, cut off the free portion, and allow the rest to lie in the uterine cavity. If two-thirds of the placenta have been removed, and the uterus well contracted, the case is to be considered in a safe condition. In event of sepsis, remove all the intrauterine mass.

DR. JOHN BARTLETT stated that, in his practice, abortions were as frequent as labors at term. The product of conception was usually expelled in its integrity. When abortion was inevitable, two conditions were required before operative interference was justifiable: (1) dilatation of the canal of the cervix to the extent necessary for the passage of two fingers; (2) the separation between decidua and the uterine mucosa

must be more or less complete. Until these conditions were present, the vagina ought to be tamponed. For a tampon, he was in the habit of employing bits of cotton tied on a string in the manner of the kite-tail.

He had seen two cases in which the placenta had remained for a long period of time within the uterine cavity without causing symptoms. The retention in one case lasted through a period of three months; in the other case, the period was four months. As to the length of time the tampon could be left *in situ*, he had adopted Dr. De Saskie Miller's rule of allowing it to remain twenty-four hours. He had frequently tamponed through three days. The colpeurynter of Broca was a useful tampon. No tampon was effective when the hemorrhage was not of a passive character, and uterine contractions were severe.

It was necessary to diagnosticate between placenta prævia and abortion. Placenta prævia implied simply an *error loci* of the ovum. It was included between the ring of Bandl and the external os. Dr. Bartlett had never seen a case of abortion terminate fatally from hemorrhage.

DR. H. P. MERRIMAN, after endorsing Dr. Byford's remarks on the etiology of the condition, said that he did not like to use ergot in these cases, as it caused irregular contractions of the internal os, imprisoning the placenta, without favoring its expulsion. He produced uterine contractions by dilating the os, and then followed the expectant plan of treatment.

DR. D. W. SAWYER, in closing the discussion, said that he had observed abortion in the lower animals, and concluded they required little interference. He then briefly sketched the line of expectant treatment which he was in the habit of recommending.

THE NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, November 20, 1884.

THE PRESIDENT, FORDYCE BARKER, M.D., LL.D., IN THE CHAIR.

DR. V. P. GIBNEY read a paper on

THE SURGICAL MANAGEMENT OF RACHITIC DEFORMITIES OF THE LOWER EXTREMITIES.

He said that it was his firm conviction that a fair proportion of cases of knock-knee recovered spontaneously; and his reasons for this belief were that: (1) During the period between 1871 and 1877, he had seen 255 cases of genu-valgum at the Hospital for Ruptured and Crippled in Forty-second Street, in patients under fourteen years of age. When mechanical appliances were used in its treatment, it was in the form of internal and external steel springs, with a foot-piece and pelvic band. In the cases treated since, in 1877, the pelvic band had been dispensed with; but he did not believe that the percentage of cures was any larger since this had been the case. (2) The scarcity of cases of knock-knee, in adults, seen in the city of New York. The larger number of cases of osteotomy for this affection were in children between the ages of three and eight years. In regard to the deformity of bowlegs, he was also convinced that many cases recovered without surgical treatment. During the period mentioned, he had seen 1005 cases at the hospital; in 927 of which the patients were under fourteen. Three were in adults, and five in patients between fourteen and twenty years of age. The great majority of cases operated on since 1879, were in children under seven.

It was pertinent to inquire, then, what cases could safely be left to nature. In patients under two years old, he thought, no mechanical appliances or operations should be resorted to, unless the deformity was extreme. In those under three, in which there was a moderate degree of deformity, the case should also be left to nature. He was in the habit of taking the outlines of the limbs for future reference, and then if, on careful examination, the condition of the bones indicated that there was a chance for spontaneous improvement, wait to see how the case progressed without treatment. As knock-knee and bowlegs are, as a rule, due to rachitic disease, it was reasonable to expect much from medicinal and hygienic treatment, and he had known many children affected with these deformities to recover rapidly and completely, simply by removal to the country for a time. In the way of medication, the phosphates of lime and soda had been supposed to be useful; but he felt satisfied that their only beneficial effect was on the digestive function. The efficiency of cod-liver oil in these conditions had long been fully recognized.

In regard to the use of manual force, he said that a resort to it was demanded in cases in which the parents of the child were too poor to purchase the necessary apparatus, or too improvident for its proper management, when there was little time to effect a cure, and when, under either of the above circumstances, the bones were in a condition to yield to its application. To illustrate this, he related a case of a rachitic child, four years old, suffering from genu-valgum, whose parents were poor Italians. At the New York Polyclinic, he fractured the femur, the tibia, and fibula of each leg, and, having straightened the limbs, he surrounded them with borated cotton, and applied a plaster-of-Paris dressing. The operation was followed by no bad consequences, and on the seventh day he removed the plaster of Paris. The right leg was not entirely straight, though it could readily be made so under the application of pressure; but the left was found to be completely straightened. In the meanwhile, the child was constantly treated with cod-liver oil and the syrup of the hypophosphites. Subsequently some curvature of the femurs was found, and this he had no doubt was due to the fact that the splints had not been carried above the hips. It would, therefore, be necessary to fracture them again, and this time after the operation he would have the child placed in a wire cuirass, so as to make sure of the result.

Having referred to Macewen's opposition to splints, he said that in the matter of mechanical appliances Mr. William J. Little stood at the head of orthopædic surgeons. In the Forty-second Street Hospital the ostensible rule was that three years was the youngest age at which retentive splints were to be resorted to; but practically this limit was five years. Little assigned really no limits to these, and he had undoubtedly accomplished cures with them in many cases in which most surgeons would have employed operative procedures. All the springs now in use acted on the principle of bringing force to bear against the convexity of the

curve at its apex, and probably the simplest form of portable splints that had been devised are those in use at the Forty-second Street Hospital. Having spoken of their efficiency, and having referred to various other forms of apparatus, Dr. Gibney mentioned that Dr. Poore placed the percentage of cures at less than thirty per cent.

He then briefly spoke of osteoclasis, which, he said, had never been popular with surgeons in this country. In France, on the other hand, the procedure was very highly esteemed, and the osteoclast of M. Robin, of Lyons, was certainly a very admirable instrument.

Passing on to the subject of osteotomy, he alluded to the paper which Macewen, of Glasgow, had read before the recent International Medical Congress at Copenhagen, and epitomized in an admirable article in THE MEDICAL NEWS of November 1st. Out of 820 personal operations suppuration occurred in only 8 cases; the cause in 6 being pressure or some extra force applied under accidental circumstances. Five of the patients died, but in not a single case of these was death due to the operation. Having referred to the danger of arterial hemorrhage in osteotomy, Dr. Gibney said that in one instance he had himself met with alarming hemorrhage from the bone itself. It was the only case in which he had seen any hemorrhage. Of his own cases, one was that of a patient with anterior tibial deformity, a condition which he had never seen at all affected by mechanical appliances. In this instance the latter had been tried for twelve months previous to the operation. He had performed nine linear and two cuneiform osteotomies. At the Polyclinic he was accustomed to send the patients home as soon after the operation as the plaster-of-Paris dressing was dry.

The lessons which he had learned from his experience with osteotomy are the following:

1. Exaggerate the curvature of deformity.

2. Examine the limb at the end of a week to ascertain whether the amount of the curvature is the amount desired.

3. Do not hesitate to refracture by manual force if it be necessary.

4. In dispensary cases do all the operating you propose at one sitting.

He was accustomed to use strict Listerism at his operations, and he thought that three months was not too long for the patient to wear mechanical support after osteotomy. Macewen, by the brilliant results that he had achieved, had convinced all that supracondyloid division of the femur was the only osteotomy for genu-valgum.

DR. JOSEPH C. BRYANT said that he agreed with Dr. Gibney that there was a large number of cases of the deformities referred to in the paper which could safely be left to nature. No better proof of this could be desired, he thought, than would be furnished by a visit to the quarters of the city occupied by the poorer classes of negroes and Italians. In these localities would be found large numbers of children suffering to a marked degree from these conditions; and the great majority of them would undoubtedly get well without any treatment whatever. The matter of leaving such deformities to nature involved a consideration of their cause. The exact cause had not as yet been fully determined, but the weight of the body had perhaps something to do with the etiology. To muscular contraction had also been attributed some part in the causation; but this was open to question. But if the weight of the body or muscular contraction were the real cause, it was not right to leave these cases to nature, and something ought to be done.

Having spoken in passing of the importance of medication and hygiene, Dr. Bryant went on to say that if in a case of bowlegs he found on pressing them that the bones were more or less springy, he was in the habit of rectifying the deformity by repeated forcible pressure upon the point of greatest convexity. In a child of eight years, with marked anterior tibial curvature, he employed anæsthesia, and by means of force, after section of the tendo Achillis, he reduced the deformity two-thirds. Then, repeating the pressure without anæsthesia three times a week, the result was that in six weeks' time the tibia was perfectly straight. In cases of this kind he thought manual force was better han osteotomy, and in this particular instance no less than three osteotomies would have been required.

In cases suited to apparatus, he preferred a spring of considerable force, but yet not too strong. Osteoclasis, up to the present time, had been very little used in New York, and he himself would certainly never resort to it in the vicinity of a joint, as would be necessary in genu-valgum. If, however, he had to deal with a marked tibial or femoral curve, with its apex near the centre of the bone, he thought the procedure would prove satisfactory, except in cases of anterior curvature of the tibia, when the force would come directly upon the sharp crest of the bone. Osteotomy, performed with antiseptic precautions, was in his opinion one of the advances in surgery of the century. He had never seen the slightest bad result from it, and in a number of operations which he had performed at Bellevue Hospital he had never met with a drop of pus. The oldest patient in whom he had performed supracondyloid osteotomy was sixteen years of age, and in this instance the temperature after the operation went up for a short time to 102°. The case did perfectly well, however, and he had been informed by other surgeons that such a rise of temperature was not at all infrequent after osteotomy. As to the applicability of this operation, it seemed appropriate in all those cases which had reached a stage in which consolidation of the bones had taken place. From the facility and safety with which it could be performed, however, there was some danger, he thought, of there being too many osteotomies performed.

DR. CHARLES T. POORE thought that there was no question that in the earlier stage of rachitis the bones could be bent, and sometimes this was the case, to a certain extent, at an age much greater than was ordinarily supposed to be the case. But if the deformity was due to enlargement of the condyles, and the bones had become hardened, the bones could not be bent, and he had never seen recovery. Knock-knee and other deformities of bones from rachitis were, he believed, much more common now than formerly. In regard to osteotomy, he thought that those cases in which there had been trouble from hemorrhage resulting from injury to arteries were really due to accidents which might have been prevented. In his own cases he never kept his patients in bed more than five weeks,

and usually took off the plaster of Paris at the end of the fourth week. He had never seen any recurrence of the deformity after osteotomy. In regard to operations for bowlegs, osteoclasis, he thought, was better than manual force; but he would never fracture the bone within three inches of the condyles. He had never seen an accident from it, and he had never failed to correct the deformity for which it was done. He had had no experience in trying to bend bones without an instrument, and he thought that it must be very hard work. In performing osteotomy he did not use Listerism strictly, nor did he dress his wounds after the plan of Macewen. It was always his endeavor to secure primary union.

DR. M. H. HENRY said that at the Emigrant's Hospital, of which he had been surgeon-in-chief for a number of years, he had very often observed these deformities in young children born in Europe; but that after they had been in the institution for some time they always got well. The troubles were mainly of rachitic origin, due to defective nutrition, and disappeared spontaneously under the use of good food and the hygienic conditions with which the children were surrounded.

DR. M. J. ROBERTS thought that it was probable that many of these cases that were left to nature died in early life, as it was well known how large the rate of mortality was among young children, especially in large cities, and it was reasonable to suppose that among the large number that were annually carried off, many of them were those suffering from constitutional diseases like rachitis, which gave rise to the deformities in question. Hence it was not surprising that comparatively few adults with knock-knees or bowlegs were met with. But even in those who were supposed to have entirely recovered, he believed that the recovery was often incomplete, and that although the deformity might not be at all marked, it was liable to give rise to trouble. Thus he had seen very serious symptoms caused by a slight degree of in-knee. He then exhibited a drawing representing five members of one family, none of whom had ever been subjected to treatment. All were affected with deformity of the lower extremities; but while this was most marked in the younger children, in the oldest, a lad of fourteen, it was still quite perceptible. He also exhibited a number of photographs showing similar deformities in adults.

He could not agree with Dr. Gibney in the statement that in most bowlegs there was a continuous curve from the pelvis to the foot, but maintained that the deformity was confined largely to the epiphyses, while the shafts of the femur and tibia were straight. This, he said, he had demonstrated by a number of dissections, and he now exhibited photographs of four pairs of legs in which he had made the dissections to show this point. The bow, he said, was really due to the fact that the principal changes had taken place at the articulation and between the epiphysis and the shafts, where there was the greatest motion; and by means of a paper diagram of a normal leg, he showed by making sections above and below the knee-joint how easily deformity could be produced by enlarging the epiphysis.

He did not believe that any of these cases ought to be left entirely to nature, as he was firmly convinced that every one of them could be aided. If they were to get well in a year alone, they could be cured by treatment in a much shorter time, and every case should be placed under treatment in which the conditions were at all favorable for carrying it out. While manual force was applicable in a limited number of instances, where the bones were unusually soft, he believed that nearly all the cases of these deformities could be absolutely cured by mechanical appliances. Having described various forms of apparatus, he went on to speak of osteotomy. The great difficulty that had always been experienced in dividing bones satisfactorily, he said, he had overcome by means of an electro-osteotome which he had devised. It consisted of a very delicate saw, worked by Griscom's electro-motor, and by means of it he cut through the femur of a child in three seconds, and that of an adult in five seconds. During the past year he had performed forty-five electro-osteotomies with perfectly satisfactory results.

DR. HOPKINS mentioned a case in which some years ago he had performed resection of the joint for the relief of knock-knee. The result, which was fairly good, would have been better, he thought, if the operation could have been performed with antiseptic precautions.

THE PRESIDENT said he should like to inquire what influence, if any, sex had on the disease, and the probability of a cure. It had seemed to him that mothers had directed his attention to deformities of this kind in their children more frequently in the case of girls than of boys. He had seen one case of bowlegs in a young lady of eighteen, but it did not seem to have been due to rachitic disease.

DR. GIBNEY, in closing the discussion, said that, as regards the influence of sex, he thought there were about an equal number of male and female children affected. As regards the question of relative curability in the two sexes, he could not say without consulting the statistics of the subject. One bad result had been noticed in women, and that was the occurrence of flat-foot in those who had been affected with bowlegs when they were children. The point made by Dr. Roberts, that one principal reason why so few adults were seen with these deformities was because so many of the cases died in early life, he thought, could hardly be substantiated. In Glasgow, where Macewen resided, one could hardly walk a block without encountering a number of adults with bowlegs or knock-knee; so that there, at all events, a great many such cases did not die young. In his paper, he had not touched at all upon cases of what Little called *atonic* knock-knee, and the adult cases to which Dr. Roberts had alluded were, no doubt, of this kind. He had himself seen such cases, usually in very stout men; but he did not think it would be found that they had suffered from the deformity as children.

CORRESPONDENCE.

THE MANAGEMENT OF THE OCCIPITO-POSTERIOR POSITION IN VERTEX LABORS.

To the Editor of THE MEDICAL NEWS.

SIR: At the ninth annual meeting of the American Gynecological Society, held in Chicago this fall, and reported by you in your issue of October 18th, Dr. Edward W. Sawyer, of Chicago, reports thirty-seven

cases of occipito-posterior positions, vertex presentations, in which rotation forward of the occiput failed to take place. In seventy-seven labors which I have observed, this occurred three times. In one case the mother was a primipara, in another it was the second, and in the third it was the fourth confinement. There was nothing unusual in the course of any one of these cases until the time came for the rotation forward of the occiput; then this failed to take place; the occiput passed into the hollow of the sacrum and the brow came down behind the symphysis. In each the following plan was successfully followed, in the first by Dr. Geo. W. Murdoch, and in the others by myself.

Ether was given to full anæsthesia. One hand was passed into the vagina and grasped the head, and the other was pressed upon the fœtal mass through the abdominal walls. It was then found very easy to push the fœtus up so that the head was above the superior strait, rotate it into an occipito-anterior position and flex it. Two courses were now open. Put on the forceps and deliver; or, stop the ether, and still holding the head by the hand in the vagina, wait the recurrence of pains and try to avoid the use of instruments. The latter was the plan selected, but in two cases it was necessary to use the forceps when the head came down on the perineum. The last did not require them. In all three cases mothers and children did perfectly well.

Leishmann, Playfair, and Dr. Sawyer all prefer an attempt to rotate the occiput forward, before resorting to the forceps; but no mention is made of the pushing of the fœtus upwards to render the rotation easier. It is possible to rotate without returning the head above the superior strait, but there is some doubt if the shoulders would readily follow. But little is lost by so returning it, for the parts are all fully stretched, and two or three pains suffice to bring the head again down on the perineum. This plan can, with the help of ether, be so easily followed, even after the brow has shown at the vulva, that it would hardly seem wise to put on the forceps and drag the head through, certainly endangering the perineum, and at the confessed risk to the child.

HARRY M. SHERMAN, M.D.

COLD SPRING ON HUDSON, PUTNAM CO., N. Y.,
November 24, 1884

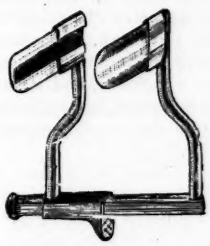
NEW INVENTIONS.

AN IMPROVED SELF-RETAINING NASAL SPECULUM.

BY JOHN N. MACKENZIE, M.D.,
SURGEON TO THE BALTIMORE EAR AND THROAT CHARITY HOSPITAL.

THE simple principle upon which this instrument acts is that involved in the ingenious eye speculum[1] and gag[2] devised by Dr. Russell Murdoch, of Baltimore.

Into the nasal extremity of each blade is fitted an ivory shield, which may be replaced, if necessary, by other dilating apparatus. At right angles to the distal end of one blade is a rectangular bar, upon which a well-fitting square sleeve, attached to the distal extremity of the other, slides with ease. This sliding motion is accomplished by means of slight pressure on the button or handle which juts out from the sleeve. In using the speculum, the ivory shields are brought together, introduced closed into the nostril, and separated by pressure on the button with the forefinger, counter-pressure being brought to bear on the free ex-



tremity of the bar with the thumb, or *vice versâ*, according to the position in which the blades are introduced.

The pressure of the sides of the nostrils arrest the sleeve at any desired point, thus furnishing the simplest possible principle of self-retention. A touch upon the button releases the blades from their fixed position, thus permitting instantaneous removal of the instrument. The upper and under surfaces of the rectangular bar are roughened to increase the amount of friction.

The speculum is made by Willms & Co., of Baltimore.

[1] Transactions of Amer. Ophthal. Soc., 1883.
[2] THE MEDICAL NEWS, Sept. 6, 1884.

OBITUARY.

SAMUEL M. BEMISS, M.D.

IN the death of Prof. Samuel M. Bemiss, M.D., of New Orleans, the medical profession of the United States has lost one of its most enlightened and earnest members, the State a valuable citizen, the Tulane University of Louisiana a capable and instructive professor, the sick poor of the city a sincere and self-sacrificing friend, and his wife and children a genial companion and devoted father and husband. To all human appearances, only the day before his fatal seizure, his splendid physique manifested no sign whatever of the approaching catastrophe, and his sudden taking off came, therefore, like a dreadful cyclone, sweeping away in its remorseless fury the treasures of a well-stored mind and the living example of nature's noblest virtues.

The circumstances immediately preceding and accompanying his death were remarkable. He had been engaged for a month during the preliminary clinical course in teaching in the wards and amphitheatre of the great Charity Hospital. On Monday, November 17th, the didactic course opened, but was preceded by his clinical lecture at 8.30 A. M. He appeared at the appointed hour, but before entering the amphitheatre he took a seat for a few minutes in the medicine-room, remarking, somewhat incidentally, to the assistant house surgeon that his heart, which had been slightly disturbed in its action two weeks before, was again giving him some trouble. However, he responded to the ringing of the bell, and lectured for an hour upon apoplexy associated with affections of the heart. He then walked

to his office, a few blocks distant, and after remaining there for an hour proceeded home, where he was subsequently persuaded to lie down. At 5 P. M. he dictated a letter of advice to a physician in the country concerning a patient who was about to return home; and a few moments afterwards, without any warning whatever, his respiration became suddenly embarrassed, and after a few gasps ceased forever. The diagnosis made by his son, a competent physician, who was near him, was apoplexy associated with some cardiac derangement; but as no autopsy was made, and an examination two weeks previously by two of his colleagues revealed no appreciable organic change, the precise nature of the latter remains unsolved.

Dr. Bemiss was born near the small village of Bloomfield in Nelson County, Kentucky, on October 15, 1821, of parents noted in the neighborhood for their intelligence, energy, and independent Christian character. He was instructed by private tutors, but at the same time was strictly indoctrinated by his worthy parents in the great principles of morality and religion. Notwithstanding the presence of slaves in the household, he was also taught, by precept and example, that manual labor is not in itself degrading, but oftentimes the reverse, a fact which will largely account for his well-known contempt for those who consider and treat the workingman as an inferior being. It was during this formative period of his life, while living in a sparsely settled country, and roving at will through the native forests which margined his rural home, that he became imbued with that strong love of nature which was a source of so much pleasure to him in later years when, at long intervals it is true, he quietly slipped away from the city accompanied only by two or three members of his family and spent a few days in floating listlessly upon the smooth waters of Lake Pontchartrain or wandering in the silent, solemn woods which mark the shores of the Langipahox River.

Before he had attained his majority, and with a mind eager for that knowledge which relates to man, he determined to study medicine, and for this purpose entered the office of Dr. Samuel Merrifield, in his native village. Thence in due time he was sent to New York, where he subsequently graduated in the medical department of the University in the spring of 1846. Returning home, he offered for practice and soon secured by his undoubted acquirements the professional confidence of his neighbors, notwithstanding their acquaintance with him from infancy Not contented with this secluded life he removed in 1853 to Louisville, where his recognized abilities commanded in 1858 the chair of clinical medicine in the University of Louisville, from which he was transferred in 1859 to the professorship of hygiene and medical jurisprudence, and a few months later to that of materia medica and therapeutics in the same institution.

Convinced after mature reflection that it was his duty to join the Confederate cause, Dr. Bemiss left his family in Kentucky in 1862, evaded the Federal pickets, and made his appearance within the Southern lines. After a brief visit to the Army of Northern Virginia, where he had the pleasure of making the personal acquaintance of General Robert E. Lee, he returned to the West, and was commissioned as a surgeon in the Army of Tennessee. After the battle of Chickamauga he was created Assistant Medical Director of Hospitals in Northern Georgia, and in 1864 Medical Director of the Hospitals in the rear of the Army of Tennessee. The following year, the war having terminated disastrously to the Confederate States, he mournfully turned his horse's head toward his native State, and reaching Louisville again opened an office there. In less than a year he was elected to the professorship of physiology and pathology in the University, but being called a short time afterward to the chair of theory and practice of medicine and clinical medicine in the medical department of the University of Louisiana, he removed with his family to New Orleans in the fall of 1866. Here he passed the remainder of his days teaching medicine acceptably in the wards and amphitheatre of the Charity Hospital and in the hall of the University, practising his profession with rare ability and success, bearing the burdens of various public trusts, and maintaining all the while the cheerfulness and contentment of one who is convinced that he is in the line of duty. Of numerous demands made upon him for service outside of his regular duties, one of the most onerous was that imposed upon him by the Marine-Hospital Department of the United States in the fall of 1878, when he was appointed chairman of a committee for investigating and reporting upon the origin and progress of the epidemic of yellow fever which was then subsiding. Again in 1879, when the National Board of Health was created by Congress, he was selected by the President of the United States as one of the members, and notwithstanding the vast amount of labor which this position demanded for a few years, and the numerous and sore vexations to which he was constantly subjected by the enemies of the Board—vexations of which no one unacquainted with the daily history of the office can form an adequate idea—he boldly bore the brunt until the day of his death, although for several years his written resignation was in the hands of the President of the Board. Among other numerous positions which he held it is only necessary to mention that he was one of the vice-presidents of the American Medical Association in 1868.

Dr. Bemiss was a frequent and valuable contributor to the current literature of the profession. He published a most excellent article upon croup in the Louisville *Review* of 1856, but the most noted of his earlier papers was his report upon "Evil Effects of Marriages of Consanguinity" made to the American Medical Association, and printed in the *Transactions* of 1858—a paper which cost him an immense amount of original and careful research, but for which he considered himself amply compensated in the good which it accomplished, and the commendations bestowed upon it both abroad and at home. During his residence in New Orleans he was constantly busy with his pen jotting down and subsequently publishing the results of his observation and experience. These contributions were generally made in the pages of the New Orleans *Medical and Surgical Journal*, of which he was the senior editor for several years. Only a few weeks before his death he completed an elaborate but thoroughly practical article upon "Malarial Fevers" for the *American System of Practical Medicine*, now in course of publication in Philadelphia. His experience in this class of diseases in hospital and private practice was probably unsurpassed in this country, and the profession is fortunate in having it upon record.

NEWS ITEMS.

NEW YORK.

(From our Special Correspondent.)

THE SYSTEM OF LIFE INSURANCE AMONG MEDICAL MEN, which exists in this city, is now a most perfect one. The Society for the Relief of the Widows and Orphans of Medical Men now numbers nearly five hundred members, and the payment of four hundred and seventy-five dollars is made to the heirs of a deceased member.

THE DANGER OF CANNED GOODS.—A number of medical men met at Columbia College the other night to discuss the dangers of canned food, and contamination by metal. The conclusion arrived at was that the alleged evils were very much exaggerated.

"CROWNERS' QUEST."—It is to be regretted that no such excellent system of medical examination in coroners' cases exists in this city as is found in Boston and other cities. Coroners' inquests are little better than they were twenty years ago. The coroners are usually politicians of the worst stamp, who pick up all sorts of men to do their work, and the investigations of these people bear no scientific value. It is to be hoped that the bill which is to be presented to the Legislature this winter, providing for a Board of Examination, who are to be appointed by the Mayor upon the suggestion of the medical colleges, will be passed, and something like a decent system of medico-legal inquiry may be inaugurated.

CANADA.

(From our Special Correspondent.)

CANADIAN MEDICAL SCHOOLS.—The various medical schools in Canada have commenced work with a full complement of students. Trinity College, Toronto, is said to have one hundred new students, and the Toronto School of Medicine almost as many. McGill Medical School has more new students than ever before (between eighty and ninety). It was expected that owing to the enforcement, by McGill University, of a full four years' University course (a year with a doctor not, as heretofore, counting), with a compulsory summer session, would reduce the number of students for a year or two, but it is gratifying to learn that a more rigid course has attracted the best students in larger numbers. In the introductory addresses before the Toronto schools the advantages of a four years' university course were much dwelt upon, but, as a matter of fact, the large majority of students attending the Toronto schools are three years' men, the fourth year being made up by a preliminary year's study (!) with a doctor. The only proper way for the Toronto schools to prove that their desire for a four years' course is sincere, is to make such a course compulsory, and not allow the farce of studying a year with a doctor to count as equal to a year's college and hospital work.

The women's medical colleges in Toronto and Kingston opened with fair classes, and their finances were reported in a prosperous condition.

ANATOMY OF THE CAT-FISH.—The able Professor of Biology in Toronto University has just issued a complete monograph on the *Anatomy and Histology of the Cat-fish*. In this work he has been assisted by Prof. McMurrich, of Guelph Agricultural College, and Messrs. A. B. McCallum and F. McKenzie. The monograph will be a most valuable addition to our knowledge of this peculiar class of fishes. Many new points of special interest are touched upon, and others formerly obscure made clear. It will be an invaluable guide to workers in this field.

CHICAGO.

(From our Special Correspondent.)

A MEDICAL DEPARTMENT IN THE CHICAGO PUBLIC LIBRARY.—Twelve hundred bound volumes of medical books have been placed in the Chicago Public Library, through the agency of the Chicago Medical Society, and the efforts of physicians of Cook County. These books are a carefully chosen collection of the best known *recent* medical authorities in the English, French, and German languages.

This determined initiatory movement toward founding a medical library in the Northwest, is due largely to the energy of the Committee on Library of the Chicago Medical Society, of which Drs. Edmund Andrews, F. C. Hotz, and David W. Graham are members. The funds for the purchase of books have been derived from annual appropriations by the Chicago Medical Society ($500), and voluntary contributions from physicians, dentists, and druggists of Cook County.

ST. LOUIS.

(From our Special Correspondent.)

THE AMERICAN PUBLIC HEALTH ASSOCIATION MEETING.—The excitement aroused by the great national conventions which have centred here of late, and which the medical profession have also shared, has blown over, and the usual work is again going on. The practitioner has resumed his routine work, and is turning over in his mind what he has heard at the meeting of the American Health Association about germs and cholera.

We are certainly grateful that this convention was held in our city, and can but regret that it was not accorded a still more hearty welcome; but, owing to some trifling circumstances—such as the location of the hall at which the meetings were held, and the fact that sufficient announcement was not made—the profession of the city did not find their way to the distant hall until the closing session was drawing nigh, and then could but regret that they had not participated from the very first.

The building in which the meeting was held, though most excellently adapted for the purpose, with a good hall, convenient committee rooms, and all that is necessary for the pleasure and convenience of guests, is situated in rather a distant part of the city, out of the usual route of the great mass of our practitioners.

A lively interest was taken in its proceedings, and it is to be hoped most sincerely that our worthy city officials were stirred up to a realization of the importance of proper sanitary measures; and just at present, with the Asiatic scourge slowly progressing westward, their work should begin. Our streets and sewers need looking after, though our streets are improving, and our sewer

system is a most excellent one, partially owing to the natural advantages of drainage afforded by the many hills upon which the city is built, and by good engineering it has been made one of the best in the world. Yet more has to be done. Whatever may be done to protect the city from epidemics, or from the importation of disease, it all centres in one word—cleanliness. At all times advisable, but now more than ever; and to obtain this end, a liberal supply of water is certainly most important. Notwithstanding the great Mississippi River sweeps over some twelve miles of our city front, water is expensive; much more so than in most large cities. Next to cleansing the streets and sewers, no better measure could be adopted than that of giving a liberal supply of water to our citizens, and where it is most needed—in the densely populated, poorer districts—the high price of water results in a use altogether too gingerly for the public good. We need not fear the waste of water, as it is this waste which helps to cleanse pipes and sewers. The high price of water results in many consequences detrimental to the health of the city, one of the very worst of which is the continued use of wells, and not only the continued use of those already existing, but new ones are added to the number, so that we have an abundance of these breeding centres of disease. They are, of course, for the most part situated in the densely populated parts of the city, in the courts of tenement houses, near the numerous privies belonging to them. 7000 such wells supply water to our citizens in the main to the poor, to those who are obliged to economize, and who cannot afford to pay high water rates.

7000 wells in this city of 400,000 inhabitants—a larger number, it is claimed, than in any other city of similar size in this country. Thus, by the coercive demands made for the use of water, many of our citizens are forced to seek their supply from other sources. The city looses a large revenue, and offers a premium for the spread of epidemics. What is more conducive to the rapid and successful dissemination of disease—especially epidemic diseases—than such wells in the courts and yards of tenement and other houses, not kept in too cleanly a condition, surrounded by vaults, stables, cesspools, and sewers?

We must do away with these wells and waters, and more successfully than by laws and sanitary inspectors will this be accomplished by incessant cheapening and regulating the water supply; by correcting the mismanagement or fraud in this department. The high rates have cost a much greater loss of revenue to the city by forcing large manufacturing establishments to bore artesian wells, or in other ways supply their own water.

CHOLERA PROSPECTS.—We certainly have reason to expect a visitation of that dread disease—cholera—though not necessarily in a severe form, as it has taken its usual course, though the premonitory symptoms frequently observed have not been so well marked; violent diarrhœa and aggravation of abdominal symptoms have repeatedly preceded the advent of cholera, appearing the year before its coming, while the scourge was at its height upon the old continent. Some epidemics, however, have come without any such warning. Under such circumstances, we cannot help calling attention to the fact that during the past summer diarrhœa was very common; not of a serious nature; mostly not even such as to require the interference of the physician; but it is certainly a fact worthy of note, as the summer was exceptionally cool and pleasant. The diarrhœa of children—summer complaint—which usually causes such havoc at this season of the year in the hot, crowded portion of the city, dealt more mercifully with the little ones, but among adults abdominal complaints—mild forms of diarrhœa and dysentery—were quite common, certainly much more so than they are apt to be—apparently a slight forewarning.

THE WORK OF THE MEDICAL SOCIETIES has been thoroughly inaugurated for the winter. The meetings of societies are well attended. The St. Louis Obstetrical and Gynecological Society has come out of its shell and added quite a list of prominent gentlemen in general practice to the number of its members, whilst until now it was open only to those who were more directly engaged in the practice of obstetrics and diseases of women. The St. Louis Medical Society and the Medico-Chirurgical Society are made interesting by the active participation of the members.

THE MEDICAL COLLEGES are in full blast, and the handsome building erected by the new Polyclinic is rapidly nearing completion. If the work is carried on in the same spirit that it has been inaugurated, and with the same zeal, it promises to be not only one of the finest, but also one of the best, institutions of its kind—a great success in every way, certainly. The character of the gentlemen engaged in the enterprise vouches for this. They have the good will of the profession, and rarely has the progress of a building been watched, the inauguration of a new enterprise been looked forward to with more interest by the profession of the Southwest than is this.

THE NINTH INTERNATIONAL MEDICAL CONGRESS, TO BE HELD IN WASHINGTON, D. C., IN 1887.—The Committee on Organization of the Ninth International Medical Congress met in Washington, D. C., on November 29, 1884, for the determination of the general plan of the Congress, the election of Officers of the Committee, who will be nominated to fill the same offices in the Congress, and the consideration of questions of finance.

The following rules were adopted:

1. The Congress will be composed of members of the regular medical profession, who shall have inscribed their names on the Register of the Congress, and shall have taken out their tickets of admission. As regards foreign members, the above conditions are the only ones which it seems, at present, expedient to impose.

The American members of the Congress shall be appointed by the American Medical Association, by regularly organized State and local medical societies, and also by such general organizations relating to special departments and purposes, as the American Academy of Medicine, the American Surgical Association, the American Gynecological, Ophthalmological, Otological, Laryngological, Neurological, and Dermatological Societies, and the American Public Health Association; each of the foregoing societies being entitled to appoint one delegate for every ten of their membership.

The members of all special and subordinate committees, appointed by the General Committee, shall

also be entitled to membership in the Congress, together with such other persons as may be specially designated by the Executive Committee.

All societies entitled to representation are requested to elect their delegates at their last regular meeting preceding the meeting of the Congress, and to furnish the Secretary-General with a certified list of the delegates so appointed.

2. The work of the Congress is divided into eighteen Sections, as follows, viz:

1. Medical Education, Legislation, and Registration, including methods of teaching; and buildings, apparatus, etc., connected therewith. 2. Anatomy. 3. Physiology. 4. Pathology. 5. Medicine. 6. Surgery. 7. Obstetrics. 8. Gynecology. 9. Ophthalmology. 10. Otology. 11. Dermatology and Syphilis. 12. Nervous Diseases and Psychiatry. 13. Laryngology. 14. Public and International Hygiene. 15. Collective Investigation, Nomenclature, and Vital Statistics. 16. Military and Naval Surgery and Medicine. 17. Experimental Therapeutics and Pharmacology. 18. Diseases of Children.

3. The General Meetings will be reserved for the transaction of the general business of the Congress and for addresses or communications of scientific interest more general than those given in the Sections.

4. Questions which have been agreed upon for discussion in the Sections shall be introduced by members previously nominated by the officers of the Section. The members who open discussions shall present a statement of the conclusions which they have formed as a basis for debate.

5. Notices of papers to be read in any one of the Sections, together with abstracts of the same, must be sent to the Secretary of that Section before April 30, 1887. These abstracts will be regarded as strictly confidential communications, and will not be published until the meeting of the Congress. Papers relating to questions not included in the list of subjects suggested by the officers of the various Sections will be received. Any member, after April 30th, wishing to bring forward a subject not upon the programme, must give notice of his intention to the Secretary-General at least twenty-one days before the opening of the Congress. The officers of each Section shall decide as to the acceptance of any communication offered to their Section, and shall fix the time of its presentation. No communication will be received which has been already published, or read before a society.

6. All addresses and papers, read either at general meetings or in the Sections, are to be immediately handed to the secretaries. The Executive Committee, after the conclusion of the Congress, shall proceed with the publication of the *Transactions*, and shall have full power to decide which papers shall be published, and whether in whole or in part.

7. The official languages are English, French, and German.

No speaker shall be allowed more than ten minutes, with the exception of readers of papers and those who introduce debates, who may occupy twenty minutes.

8. The rules, programmes, and abstracts of papers will be published in English, French, and German.

Each paper or address will appear in the *Transactions* in the language in which it was delivered by the author. The debates will be printed in English.

9. The officers of the General Committee on Organization are a president, three vice-presidents, a secretary-general, and a treasurer, and those elected to these positions will be nominated by the General Committee to hold the same offices in the Congress. All vacancies in these offices shall be filled by election.

10. There shall be an Executive Committee, to be composed of the President, Secretary-General, and Treasurer of the General Committee, and of four other members, to be elected by the General Committee. The duties of the Executive Committee shall be to carry out the directions of the General Committee; to authorize such expenditures as may be necessary, and to act for the General Committee during the intervals of its sessions, reporting such action at the next meeting of the General Committee.

11. There shall be a Standing Committee on Finance, composed of five members, to be appointed by the President, subject to the approval of the Executive Committee.

12. Those who are elected as chairmen of the several Sections shall be thereby constituted members of the General Committee.

The officers elected are as follows:

President.—Dr. Austin Flint, Sr., of New York.

Vice-Presidents.—Dr. Alfred Stillé, of Philadelphia; Dr. Henry I. Bowditch, of Boston; Dr. R. P. Howard, of Montreal, Canada.

Secretary-General.—Dr. J. S. Billings, U. S. Army.

Treasurer.—Dr. J. M. Browne, U. S. Navy.

The Executive Committee (the President, the Secretary-General, and the Treasurer, ex-officiis).—Dr. I. Minis Hays, of Philadelphia; Dr. A. Jacobi, of New York; Dr. Christopher Johnston, of Baltimore; Dr. S. C. Busey, of Washington.

The Executive Committee will proceed at once to complete the work of organization.

THE EFFECT OF SANITATION IN GENOA.—The United States Consul at Genoa, in a recent communication to the State Department, gives an interesting account of the manner in which the cholera plague was managed in that city. After stating that the disease had disappeared from the city and province of Genoa, he says: "To summarize briefly the manner in which the authorities fought against its entrance into Genoa and the stubborn contest waged till the scourge was driven from the city: Since the outbreak of the cholera at Toulon and Marseilles a continual purification of streets, alleys, private and public houses, has been kept up, the most powerful disinfectants being used for the purpose, which has made the city all summer, as it is to-day, one grand smelling-bottle of sulphur, chlorine, etc. Impure water, or water supposed to be so, was shut off from the city; stale fruits and vegetables offered for sale were seized and destroyed; this year's wine crop was not allowed to be brought into Genoa, and all wine-shops were forced to be closed at 8 P. M. daily. The rules were rigid in regard to household cleanliness and the use of disinfectants in whitewash, and if the owner of an establishment of any size heeded not the orders of those in authority the work would still be performed and at the

expense of the proprietor. To-day, without hesitation, the people acknowledge and give their brave Mayor credit for it, that had not all these precautions been taken, Genoa would have a more lamentable record than present statistics of the epidemic show.

"To the above I beg to add certain conclusions of my own, based upon personal observation and investigation during the ravages of the cholera here, the summary of which may be useful should the scourge strike any city or town in the United States. In my dispatch dated September 30, 1884, I reported that the water from the Aqueduct Nicolay was pronounced impure for causes set forth in said dispatch; to prove this statement was not far-fetched, I give the following items:

"In 300 cases of cholera, before this water supply was shut off from the city, there were 275 deaths, and all the victims had been using this water; since the water was stopped from entering Genoa the cases have been very few among those who were able to obtain good and wholesome food. Conclusion No. 1, therefore, shows how essential is pure water to good health. It is well known here that Sunday excesses among the laboring classes proved a powerful feeder to the epidemic; the bulletins of Mondays pointed this fact out too clearly to be disputed. Conclusion No. 2, then, suggests regular habits, whether at work or at play.

"Conclusion No. 3 is based on the opinions of medical advisers that substantial food has proven a better champion in battling with cholera than doctors' medicines.

"Summary: Granted a city or town has officials who energetically and fearlessly fight everything which has a tendency to prey upon public health; granted the people abuse not nature; let substantial food be one's daily portion; to all these things a frame of mind prepared to face calmly and bravely whatever trials and vicissitudes may cross one's path, and you have an armor that will, I am positive, in nine hundred and ninety-nine cases in one thousand, baffle the type of cholera which lately raged in Genoa."

YELLOW FEVER is reported to have disappeared from the Mexican coast. The United States Consul at Mazatlan states that there were but four deaths from this disease in that locality during the month of September, and none since the 17th of that month. He adds that "the disease has on the whole this year borne a sporadic character, no cases of contagion having been recognized, and has been exclusively confined to foreigners or strangers newly arrived in this locality. But four deaths from yellow fever are reported to have occurred at Havana during the past week.

THE ENGLISH CHOLERA COMMISSION.—DRS. KLEIN and GIBBES are prosecuting their bacterial researches in cholera in the pathological laboratory of the Grant Medical College, Bombay. They have identified the comma-bacillus of Koch, which is a pathological feature of cholera cases. They have been unable to find that the microphyte is possessed of any pathogenic properties.—*Indian Med. Gazette*, Oct. 1884.

PROF. SCHWENINGER.—The Medical Faculty of the Berlin University held a meeting on November 11th for the purpose of making another and a special protest against the appointment of the former Munich Docent to the Chair of Dermatology. The *Deutsche medicinische Wochenschrift*, of November 13th, hints that there is some talk of a resignation of the entire Faculty if the body-physician of the Chancellor be not removed from his position.

DR. LOUIS A. DUHRING, of Philadelphia, has recently been elected an Honorary Fellow of the Dermatological Society of London.

THE LATE PROFESSOR COHNHEIM.—A subscription list has been opened among the pupils of the late Prof. Cohnheim, for the purpose of erecting a suitable monument over his grave. Prof. His, of Leipzig, is treasurer of the committee. The list will be closed at the end of the year.

OBITUARY RECORD.—HENRY GIBBONS, M.D., of San Francisco, died at the old homestead of his parents, in Wilmington, Del., on November 6th, in the seventy-seventh year of his age.

Dr. Gibbons received the degree of M.D. from the University of Pennsylvania, in 1829, and located himself in Wilmington until 1844, then in Philadelphia until 1850, when he removed to California. He at once took a prominent social and professional position in San Francisco. He was one of the founders of the Medical College of the Pacific, in which he filled the Chair of Practice of Medicine. While in Philadelphia he was Professor of Physiology in the Philadelphia College of Medicine. He established the *Pacific Medical and Surgical Journal*, in which he has been lately associated with his son, Dr. Henry Gibbons, Jr. He was a member and ex-president of the San Francisco Medical Society, and of the California State Medical Society, was formerly a member, and then an honorary member of the College of Physicians of Philadelphia, and of the Academy of Natural Sciences, and was one of the corporators of the Woman's Medical College of Philadelphia.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM NOVEMBER 25 TO DECEMBER 1, 1884.

LORING, L. Y., *Captain and Assistant Surgeon.*—Assigned to duty as Post Surgeon, San Diego Barracks, San Diego, Cal.—*S. O. 135, Department of California*, November 19, 1884.

WILSON, GEORGE F., *First Lieutenant and Assistant Surgeon.*—Granted one month's leave of absence from November 20th (Vancouver Barracks, W. T.).—*S. O. 180, Department of Colorado*, November 18, 1884.

WALES, PHILIP G., *First Lieutenant and Assistant Surgeon.*—Now at Fort Cœur d'Alene, Idaho Territory, ordered for temporary duty at Vancouver Barracks, W. T.—*S. O. 179, Department of Colorado*, November 17, 1884.

THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.*

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS *should be addressed to No. 1004 Walnut Street, Philadelphia.*